Information Asymmetry and Stock Market Participation: Evidence from the Uganda Stock Exchange

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Abstract

This study sought to examine the association between information asymmetry and perceived stock market participation by medium firms. A sectional survey and correlational analysis approach were employed based on a sample of 118 business tax-payers with annual chargeable incomes above Shs. 50m [USD 17,241] located within Kampala City, the heart of commercial activities in the country. Findings indicate that there is a positive and significant association between information asymmetry and perceived stock market participation by medium firms. Specifically, findings reveal that what matters is information quality. Nonetheless, information quantity counts to a lesser extent. Paucity of African literature made it difficult to corroborate the current study findings. Nonetheless, this study contributes to the dearth of evidence on stock market participation literature in Africa by investigating for

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the first time, the association between information asymmetry and perceived stock market participation by medium firms in Uganda. There is need for more research in the same area in developing countries to test the robustness of the model. To the practitioners and policy makers, this study suggests that the Ugandan Capital Market Authority should make information about its operations more available so as to make it highly familiar to the general public. This will go a long way in making the stock market an alternative financing option, especially in this era of rising costs of capital provided by other financial intermediaries.

Keywords: Information asymmetry, Information quality, Information quantity, Stock market participation

Introduction

The stock exchange markets are a vital source of capital for organizations (Alam, *et. al.,* 2011; Jaswani, 2008; Zuravicky, 2005). They play a major role in development of national economies (Bohnstedt, 2000). A review of extant literature indicates that companies in countries with well-established equity markets are less dependent on bank financing (Faris, 2010). Equity markets also allow companies to rely more on equity and less on debt thereby creating a less risky financial structure in the event of an economic down turn. More still, Myers (1984) as well as Myers and Majluf (1984) in their pecking order theory suggest that firms will initially rely on internally generated funds, then turn to debt if additional funds are needed and finally, they will issue equity to cover any remaining capital requirements. Overall, a mix of bank intermediated funds and stock markets can enhance growth (Handa and Schwartz, 2001). However, local firms in Uganda face challenges in obtaining long-term finance even as opportunities exist for accessing cheap financial resources through the Uganda Securities Exchange

(USE). The market size and activity at Uganda securities exchange are still low (Rutega, 1999; Katto, 2012). According to Katto (2012), 14 companies are listed on the USE with market capitalization of United States of America dollars (US $) 5.18 billion (bn) compared to Nairobi Securities Exchange with 60 listed companies with market capitalization of US$ 13.15bn. Even private firms that are privy to benefits of stock exchanges also seem to have avoided the stock market as means for raising capital (Sejjaaka, 2011). We ask then, 'what could be the factors for low participation on the stock market?'

Stock market participation involves issuance of new shares and raising funds through the public stock market (Dariusz, 2008), which other scholars refer to as going public (Jenkinson and Ljungqvist, 2001). It could also apply to selling shares on the secondary market. Accordingly, companies participating in stock markets are those publicly listed or quoted and traded on the stock market. The extant literature suggests a number of reasons that may explain stock exchange market participation. Previous studies have associated stock market participation with information asymmetry (Dolvin, Karen and Gerad, 2008). In studies conducted by Mugume (2004), Sufi (2006), Nott (2003) and Griffins (2002), it is reported that information asymmetry occurs when all relevant information is not known to all parties in an undertaking, resulting to adverse selection and moral hazard thereby making it difficult for private firms to access finance. It is hypothesized that firms, which already appreciate operations of the stock market are more likely to have more faith in operations of the market and therefore, would have no problems in deciding whether or not to participate in the stock market (Chemmanur, *et al*., 2010; Sejjaaka, 2011). Nonetheless, we still do not know particular constructs of information asymmetry that need to be emphasized on in order to improve stock market participation.

Thus, the objective of this study was to investigate the association

between elements of information asymmetry and perceived stock market participation of firms in Uganda. This study contributes to existing literature as follows: First, whilst there are a number of studies that have investigated the link between information asymmetry and stock market participation (for example, Hogan and Elaine, 2005; Dolvin, Karen and Gerad, 2008), evidence produced has been provided from developed country perspective with well-established stock markets. There is insufficient empirical evidence on the same in developing countries such as Uganda. Second, previous studies that have looked at the relationships fall short in providing details on specific aspects of information asymmetry and their effect on stock market participation. Third, previous studies have tended to focus on firms' characteristics and individual characteristics to explain stock market participation (Bekaert, *et. al.*, 2001; Rajan and Zingale, 2003; Karolyi, 2004). Therefore, this study is an attempt to fill these gaps. Moreover, the stock exchange market in Uganda is still very small, and so we believe more studies in this area will help boost the volume of trade including market capitalization. In relation, there is need to recommend policies for improvement of financial sector in general, and specifically capital markets. The rest of the paper is structured as follows: We continue with literature review on the stock market participation and participation costs. This is followed by methods employed in collecting and analyzing the data. The penultimate section presents results as well as discussion and the final section provides summary and conclusion.

Literature Review

Stock Market Participation Concept

Companies that participate in stock markets can be defined as those accessing public equity markets. The capital market consists of primary and secondary markets (Kofi, 1998). The primary market is one in which

companies issue new securities on an exchange to raise capital in form of initial public offerings. Primary markets are facilitated by underwriting groups, which consist of investment banks that will set a beginning price range for a given security and then oversee their sales directly to investors. The secondary market is one in which shareholders can resell their shares to other interested buyers on the stock exchange or over-the-counter market. Most studies measure stock market participation in terms of market capitalization and volume of trade (Adelegan, 2008; Rajan and Zingale, 2003; Karolyi, 2004).

Market capitalization is perhaps the most important criterion in assessing the size of a capital market. Market capitalization equals to value of listed shares divided by nominal Gross Domestic Product (GDP). The ratio has been widely adopted in literature as a stable measure of stock market participation for various reasons. According to Adelegan (2008), it is a proxy of size of the stock market, which is positively correlated with the ability to mobilize capital and diversify risk and presumed to include firms' past retained profits and future growth prospects so that a higher ratio to GDP signifies growth prospects and stock market development (Levine and Zervos, 1998; Hargis, 1998; Moel, 2001; Bekaert, *et. al.,* 2001; Rajan and Zingale, 2003; Karolyi, 2004). The key weakness of this ratio is that a high ratio solely driven by appreciated value of few firms with little or no change in the amount of funds raised, and no change in the breadth of the stock market may be interpreted as stock market efficiency. Growth in market capitalization as a share of GDP is associated with an increase in the number of listed firms (Adelegan, 2008).

The volume of trade, which also measures stock market participation refers to the number of share traded. It has been commonly used as a proxy of the breadth of the stock market (Cornrad, Hameed and Niden, 1994; Andrew and Jiang, 2006). The implication is that the larger the volume of trade, the higher the participation rate.

Information Asymmetry Concept

Information asymmetry describes the condition in which relevant information is not known to all parties involved in an undertaking (Ekumah and Essel, 2003). Related to this, researchers like Nathan,Carolyn and Micheal (2012) define information asymmetry as a condition in which one participant in an exchange possesses more or better information than the other. Constantiu (2001) adds that some information to the public provided is always inadequate and untimely, and such conditions could lead to disastrous/ unfavorable decisions. According to Chiang and Venkatesh (1986), insiders have access to the information, which is non-public and this privilege can provide an advantage to insiders during trading. On the other hand, outsiders (investors) have to rely on different sources to get the information about possible moves and potentials of a company. In financial markets, information asymmetry arises between borrowers and lenders because borrowers generally know more about their projects than lenders do. Information asymmetry entails absence of accurate, timely, complete, quantity and quality information about the borrowers' ability and willingness to pay back the loan (Nott, 2003).

Information asymmetries arising from information differences and conflicting incentives between entrepreneurs and savers can perhaps lead to a breakdown in the functioning of the capital market (Akerlof, 1970). All corporate investments create information asymmetries because managers can continually observe changes in investment productivity on an individual asset basis, whereas outsiders obtain only highly aggregated information on investment productivity at discrete points of time (Aboody and Lev, 2000). Previous studies have suggested several solutions to the information problem. Kreps (1990) argued that optimal contracts between entrepreneurs and investors will provide incentives for full disclosure of private information and thus, mitigate the misevaluation problem. Another potential solution to the information asymmetry problem is regulation that

requires managers to fully disclose their private information (Kothari, 2001). However, the increased disclosure and compliance with the regulatory framework that is imposed on listed companies entails substantial costs as argued by Christoph and Dick (2007).

Information Quality and Quantity

According to O'Brien (1996), information is the degree of information content, form and time characteristics that give it value to specific individuals as well as users. Stiglitz and colleagues (2001) observed that information asymmetry can be measured on the basis of information quality and quantity. Information quality refers to relevant information that is associated with high level of completeness, accuracy, correctness, and the impartiality with which it is collected. Afzal, Roland and Al-Suqri (2009) add that the more accurate the information, the higher the quality. Information is said to be of good quality if it is reliable, timely, complete, fair and consistent, and presented in clear as well as simple terms, relevant and understandable to its users. Information quality can be enhanced through increased information disclosure, because it avails more information to parties involved, which further reduces on risks of information asymmetry.

Information quantity, on the other hand, refers to amount of information available to a user for decision-making purposes. Previous studies on decision-making process seem to agree and assert that provision of too much information leads to poorer decisions than expected. Likewise, too little information leads to poor decisions (Afzal, Roland and Al-Suqri, 2009; Malhotra, 1982; Jarvenpaa, 1989). This means that for better decision-making process, information needs to be adequate or sufficient. Or, simply put, information has to be precise and concise. Afzal, Roland and Al-Suqri (2009) argued that attributes of information, for example, quantity and quality have an impact on the decision-making process. Therefore, the nature of information can play an important role in making a choice.

Information Asymmetry and Stock Market Participation

The implications of informational asymmetries are well documented in economic and sociological literature. For instance, the study by Merton (1987) asserts that acquisition of information and its dissemination encompass a central activity in all areas of finance, and especially so in capital markets. At the heart of the pecking order hypothesis (POH) there is the asymmetry of information between the company's management and 'uninformed' outside investors (Hutson and Elaine, 2005). This information asymmetry implies that a new share issue will trigger a reduction in the stock price because investors assume that managers will issue stock only if they perceive it to be overvalued. The POH predicts that in order to avoid this adverse signaling problem, managers will finance projects from retained earnings where possible. Once internal sources of finance are exhausted, managers will opt for debt in preference to equity financing.

Previous studies (for example, Chemmanur, *et. al.*, 2010; Sejjaaka, 2011) pointed out that private firms facing less information asymmetry and those with projects that are cheaper for outsiders to evaluate are more likely to go public. Firms, which already appreciate operations of the stock market are more likely to have more faith in operations of the market and therefore, would have no problems in deciding whether or not to participate in the stock market.

When managers anticipate an increase in the asymmetric information, even though they have private information at present, they may choose to issue equity. The goal is to determine the optimal sequence of securities as a function of the size and dynamics of the asymmetric information advantage that insiders of the firm have with respect to outside investors. When managers know more about the mean expected returns, that leads to the classical pecking order of using all internal funds first and if additional capital is needed to be raised, debt should be issued. Equity should be issued only as a last resort when the leverage is at a very high level at which the

firm has exhausted its debt capacity. In fact, however, companies make a sequence of financing decisions over time. It is clear that myopically, following the pecking order rule, it is not going to be optimal for a big proportion of firms.

Methodology

Research Design and Sample

This study utilized a correlational design based on a cross-sectional survey and is confined to business taxpayers with chargeable incomes above 50 milion Uganda Shillings (URA, 2007). The choice of this group was based on the assumption that such businesses have the potential to list on the USE. A sample of 118 medium firms was drawn from ventures located in Kampala (capital city of Uganda) using the Uganda Revenue Authority tax- payers' list (2013). Kampala region was chosen because it is the commercial heartland where most of the business activities take place. In addition, the business model in this region is predominantly small businesses (Kazooba, 2006; UBOS, 2012). In particular, firms that were selected were limited to agriculture, industry and service sectors. A multi-sector sample was preferred because it controls for sector specifics that could influence the extent of stock market participation across firms.

The participants were selected using simple random sampling technique. Specifically, a sampling frame was obtained from URA of firms with chargeable incomes above Shs.50 m in Kampala. A lottery method was then employed, where numbers 1 to 164 were written on different small pieces of paper, then placed in a box, and picked one by one without replacement till the required 118 was achieved. At the end, the firms selected to participate in this study were limited to those assigned to the selected pieces of paper. The approach has been successfully applied by previous scholars. The senior manager (unit of inquiry) was interviewed on behalf of the firm.

The field data were collected through a face-to-face approach and a response rate of 91 percent was achieved. The data collection approach was chosen because limited availability and efficiency of postal as well as communication services in Uganda could not allow copies of the questionnaire to be mailed, faxed or couriered to respondents without causing selection bias.

Operationalization and Measurement of Variables

Information Asymmetry

Generated item questions were to capture quality and quantity of information provided to enable accessing funds through the stock market exchange. Consequently, this study measured information asymmetry in terms of information quality and information quantity, using scaled developed and tested by previous scholars (Afzal, Roland and Al-Suqri, 2008; Griffins, 2002; Nott, 2003).

Information quantity included items such as 'availing detailed information required to be listed on the USE,' 'the stock exchange informing companies about its operations,' 'companies having adequate information about the opportunities at the USE' and 'The USE emphasizing on disclosure of the company's position in terms of financial status so as to be listed'.

The quality of information included items such as 'companies ensuring consistency in preparing financial statements,' the firms' financial information being neutral and free from errors,' 'always presenting financial statements in accordance with approved procedures,' 'always presenting accurate information,' 'providing information adequate for listing on the stock market' and 'accountants knowing that financial information is relevant for the stock market listing.' [Overall, Cronbach's alpha coefficient for information asymmetry = .71].

Perceived Stock Market Participation

Generated item questions were to capture firms 'go public/ trading shares.' Since our sample consisted of firms not yet listed on the stock exchange market, we measured stock market participation in terms of 'perceived participation.' [Overall, Cronbach's alpha coefficient for stock market participation = .82].

Data Management and Analysis

Data analysis began with coding of the instruments. Then data were checked, cleaned, coded and labelled using a quantitative analysis software package (SPSS) adopted for Windows version 19. In the data cleaning process, identified outliers using box and whisker plots that were due to entry errors had to be removed and replaced with correct values. The Kolmogorov-Smirnov and Shapiro-Wilks tests for normality of data and Levene's tests to homogeneity of variance revealed a normal distribution and thus; there was no need for data transformation. The Pearson zero-order correlations between the study variables were automatically obtained with either one or five percent significance level. Multiple regressions were also computed to establish predictive powers of independent variables on dependent variables under study.

Results and Discussion

Sample characteristics - Results in Table 1 (Appendix) show that majority of the respondents were males. The age distribution indicates that majority belonged to 30 - 40 year age bracket, while the highest education level attained by the majority was a bachelor degree. In terms of firms' characteristics, Table 2 (Appendix) shows that majority of the firms belonged to the service sector, had annual chargeable incomes of between 50 to 100 million shillings, employed between 10 – 50 employees and had been in existence for over 10 years.

Correlation analysis - In order to achieve the study objectives, a Pearson(r) correlation analysis was conducted. The results are presented in Table 3.

Table 3: *Correlation Results*

Variables	**1**	**2**	**3**	**4**
Information quantity [1]	1			
Information quality [2]	.320**	1		
Information asymmetry [3]	.780**	.842**	1	
Stock mrkt participation [4]	.475**	.617**	**.677****	1

**. Correlation is significant at the 0.01 level (2-tailed)

The results showed that there is a significant positive relationship between information asymmetry and perceived stock market participation (r=.677, *p<.01*). This means that a positive change in information asymmetry is associated with a positive change in perceived stock market participation. Table 3 further shows that information quality has a higher correlation (r=.617, *p<.01*) with stock market participation of medium firms when compared to information quantity. This means that in Uganda, information quality is more correlated to stock market participation than information quantity, a piece of evidence, which has been insufficiently reported in previous studies.

Regression analysis – we used an ordinary least square regression to first, predict stock market participation using information asymmetry as a global variable. Second, we regressed the constructs of information

asymmetry on stock market participation for a more enriched position of the explanatory power of the predictor variable.

Table 4: *Regression Results*

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.236	.179		6.901	.000
Information asymmetry	.573	.061	.677	9.437	.000
R = .677; R2 = .459; Adj R2 = .454; F Stat= 89.01; sig=.000, Durbin Watson = 1.943					
Dependent variable = stock market participation					

The following regression equation defines the model in Table 4.

OLS Model: $PSMP = \hat{a}_0 + \hat{a}_1 IA + å$
Where: PSMP = Perceived Stock Market Participation
$\hat{a}_0$ - is a constant
$\hat{a}_1 IA$– is the unstandardized B coefficient of information asymmetry
å is the error term

Results in Table 4 indicate that information asymmetry as a global variable has an explanatory power of 45.4 percent of the variance in perceived stock market participation of firms. The model also reveals a statistically significant relationship between information asymmetry and perceived stock market participation (F stat= 89.01; p<.001).

Table 5 presents results of behavior of components of information asymmetry. Results indicate that the two constructs (information quality and information quantity) combined have an explanatory power of 45.6 percent, approximately 46 percent. Specifically, information quality explains

more of the variance in perceived stock market participation (Beta .518; p<. 001) than information quantity. The model also reveals a statistically significant relationship between constructs of information asymmetry (information quality and information quantity) and perceived stock market participation (F Stat= 45.42; p<.001).

Table 5: *Regression Results of the Elements of Information Asymmetry*

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.273	.181		7.017	.000
Information quantity	.230	.056	.309	4.092	.000
Information quality	.332	.048	.518	6.843	.000
R = .683; R2 = .466; Adj R2 = .456; F Stat= 45.42; sig=.000, Durbin Watson = 1.925					
Dependent variable = stock market participation					

The following regression equation defines the model in Table 5:

Model: $PSMP = \hat{a}_0 + \hat{a}_1 IQNTY + \hat{a}_2 IAQLTY + å$
Where: PSMP = Perceived Stock Market Participation
$\hat{a}_0$ - is a constant
$\hat{a}_1$IQNTY– is the unstandardised B coefficient of information quantity
$\hat{a}_2$IQLTY – is the unstandardised B coefficient of information quality
å is the error term

Our study results are consistent with previous scholars who have established significant relationship between information asymmetry and stock market participation (for example, Afzal, *et. al.,* 2008; Chemmanur, *et. al.,* 2010; Ekumah and Essel, 2003; Sejjaaka, 2011). Awareness about the firms' financial position, financial performance and non-financial performance are pertinent for participation on the stock market. When

shares are listed, the public or potential shareholders need to know the kind of investment there are taken on. It is only natural that one would not want to invest in a dying company. To this extent, what matters is the kind of information that is published and made available. Thus, full disclosure is fundamental. Our findings suggest that what matters is the quality, and, to a lesser extent, the quantity counts. Too much information results to information overload. Besides, some companies may decided to hide under such cover. It is time for more studies to uncover salient aspects of information asymmetry that companies and the stock market exchange authority need to emphasize.

Conclusion and Implications

Presented findings and discussions from this study lead to the main conclusion that if we are to see more private firms participate on the stock exchange market, the role of information quality and quantity of financial disclosure should not be ignored. This means that when information is accurate and clear, more private firms will be seen participating on the stock exchange market. It is evident that private firms facing less information asymmetry are more likely to go public, firms, which already appreciate operations of the stock market are more likely to have more faith in the operations of the market and therefore would have no problems in deciding whether or not to participate in the stock market. In this regard, this study extends the predominantly capital market studies to stock market participation in developing countries such as Uganda. Future studies need to replicate findings from this study in different contexts to test robustness of the model.

The study limitations can be seen as fruitful avenues for future research under the same theme. Firstly, this study lacks cross-validation. The extant literature is replete with studies on information asymmetry and stock market participation. Consequently, the limited literature available, especially in a

developing country context, deprived the study of the opportunity to cross-validate the present study findings. Future studies should be conducted to confirm these results. Secondly, a cross-sectional survey design was employed and thus, the study is limited to a particular occasion of measurement. Given that perceptions and beliefs change over time, there is need for a longitudinal study. In addition, the approach did not allow making clear causal attributions for the observed relationships. Therefore, results must be interpreted with caution. Thirdly, the study concentrated on participation cost as a predictor of stock participation. Future studies should investigate effect of other factors such as financial literacy and knowledge management.

References

Afzal, W., Roland, D., & Al-Squri, M. N. (2009). Information asymmetry and product valuation: An exploratory study. *Journal of Information Science*, 35(2), 192-203.

Akerlof, G. A. (1970). The Market for Lemons: Quality uncertainty and the market mechanism, *Quarterly Journal of Economics,* 84, 488-500.

Alam. M., S. Yasmin., M. Rahman.,& M.Uddin. (2011).Effect of Policy Reforms on Market Efficiency: Evidence from Dhaka Stock Exchange. *Economics Research International* Volume 2011, Article ID864940, 8 pages.

Andrew W. Lo & Jiang Wang, 2006. "Trading Volume: Implications of an Intertemporal Capital Asset Pricing Model,", *Journal of Finance American Finance Association*, vol. 61(6), pages 2805-2840, December.

Bekaert, Geert, Campbell Harvey and Christian Lundblad, (2001). "Emerging Equity Markets andEconomic Development," *Journal of Development Economics,* Vol. 66,

Bohnstedt, A., Alfred, H., & Ralph, P. (2000). Capital Market Development in Uganda – Private sector opinions on listing. Bank of Uganda – German Technical Co-operation Financial System Development (FSD) Project, FSD Series No. 2

Chemmanur, T. J., S. He, & D. K. Nandy. 2010. The going-public decision and the product market. *Review of Financial Studies 23(5):* 1855-1908.

Christoph, K., & Dick, S. (2007). Going Public and Being Public - A Global Comparison of the Impact of the Listing Decision on the Cost of Capital.

Conrad J, Hameed A, Niden C (1994). Volume and autocovariances in shorthorizon individual security returns, *Journal of Finance*. 49:1305-1329.

D. Aboody & B. Lev. (2000). Information Asymmetry, R&D, and Insider Gains, *Journal of Finance,* 55(6). 2747-2766.

Dariusz, W. (2008). Innovation and stock markets: International evidence on Manufacturing and services, Oxford University Centre for the Environment Working Paper

Dolvin, S., Hogan, K. M. & Olson, G. T. (2008., Information Asymmetry and the Cost of Going Public for Equity Carve Outs. Scholarship and Professional Work Business Paper 42.

Ekumah E.k. & Essel T. T. (2003). Information is power. The problem with credit accessibility in rural banks in Ghana. Ghana: International labor organization 2002.

Faris Nasif AL- Shubir. (2010).Analysis the Determinants of Market Stock Price Movements: An Empirical Study of Jordanian Commercial Banks International *Journal of Business and Management Vol. 5, No. 10;* October 2010

Griffins, F. (2002). Proceeding of the Symposium on Modalities for Financing SMES in Uganda. United Nations Conference on Trade and Development, Geneva (2002).

Guiso, L., P. Sapienza & L. Zingales (2008) . Trusting the Stock Market, *Journal of Finance,* 63 (6), 2557—2600.

Guiso, L., Sapienza, P. & Zingales, L. (2005). Trusting the stock market, working paper, University of Chicago and Northwestern University.

Handa, Puneet and Robert A. Schwartz (2001), ³How Best to Supply Liquidity to a Securities Market´, *African Emerging Markets, Contemporary Issues Vol. 1.*

Hargis, K., and P. Ramanlal, 1998: "The Internationalization of Equity Markets: Domestic Market Development or Retardation? *Journal of Financial Intermediation Vol. 7,* pp. 263–292.

Japheth, Katto.(2012). East African capital markets integration. An illusion or A posssibility. Presentation at EAC legal harmonization conference 6th & 7th August 2012. Ngurdoto mountain Lodge. Arusha, Tanzania.

Jarvenpaa, S. L. 1989. "The effect of task demands and graphical format on information processing strategies." Management Science Vol. 35, No. 3 (March): 285 - 303

Jaswani, T. (2008), Function And Purpose Of Stock Market, Articlesbase website <http://www.articlesbase.com/investing-articles/function-and-purpose-of-stockmarket-582881.html

Jenkinson, Tim & Alexander Ljungqvist, (2001). Going Public: The Theory and Evidence on How Companies Raise Equity Finance (2nd edition), Oxford University Press.

Karolyi, G.A, 2004, The Role of American Depositary Receipts in the development of Emerging Equity Markets, *The Review of Economics and Statistics, August, 86(3),* pp. 670–690.

Kofi A. Osei (1998). Analysis of factors affecting the development of an emerging capital market: The case of the Ghana stock market. *African Economic Research Consortium (AERC) Research Paper* 76, Nairobi March1998.

Kothari SP (2001). Capital Market Research in Accounting, *Journal of account and Economics.*31:105-231.

Kreps, David M., 1990, Corporate Culture and Economic Theory, in James E. Alt, and Kenneth A.Shepsle, eds.: Perspectives on Positive Political Economy (Cambridge University Press, Cambridge, England).

Levine, R., and Zervos, S. (1998). Stock markets, banks, and economic growth. *American Economic Review ,* 88:537-558.

Malhotra, Naresh K. (1982), "Information Load and Consumer Decision Making," *Journal of Consumer Research,* 8 (March), 419-430.

Misukin A.K. (1991). "The Economics of Money, Banking and Financial Markets" Town. Addition Wesley 5th Edition.

Moel, A., 2001, "The Role of American Depositary Receipts in the Development of Emerging Markets," *Economia Vol.* 2(1), pp. 209–257.

Mugume. M. (2004). Sustainable Microfinance: The balance between financial sustainability: A business model integrating remittances and cross broaden entrepreneurship in microfinance.

Myers, S. (1984). The capital structure puzzle. Journal of Finance, 39, 572-592, http://dx.doi.org/10.2307/2327916.

Nathan J. Claes,Carolyn Hurley,&Michael A. Stefanone, (2012). Do Me a Solid? Information Asymmetry, Liking, and Compliance Gaining Online.

Nott, L. (2003), Provision of financial services with a wider African. *Journal of Accounting, Economics, Finance and Banking Research,* 5(5), 34-56.

Nott, L. (2003). The role of information in lending: The cost of privacy restrictions, Congressional Research Report. The Library of Congress.

O'Brien, J.A (1996) Management Information Systems: Managing Information Technology in the Networked Enterprise, 3rd (Ed). Irwin Publishers, Chicago.

Olatundun Janet Adelegan, (2008). Can Regional Cross-listings Accelerate Stock Market Development? Empirical Evidence from Sub-Saharan Africa. International Monetary Fund. Monetary and Capital Markets Dept. *Issues 8-281 of IMF working paper.*

P. C. Venkatesh & R. Chiang, (1986). Information Asymmetry and the Dealer's

Bid-Ask Spread: A Case Study of Earnings and Dividend Announcements. *The Journalof Finance Volume 41,* issue 5, 1089–1102, December 1986

Rajan, R., and L., Zingales, 2003, "The Great Reversals: The Politics of Financial Development in the 20th Century," *Journal of Financial Economics,* 69(1), pp. 5–50.

Robert Merton.*(*1987). A Simple Model of Capital Market Equilibrium with Incomplete Information. *Journal of Finance*, 1987, vol. 42, issue 3, pages 483-510

Rutega, S. (1999). "Events at the Uganda Securities Exchange", Capital Markets, *Journal for the Capital Markets Industry*, Kampala, Uganda, April/Dec 1999.

Sejjaaka, S. (2011). Determinants of IPO readiness in emerging markets: the case for Ugandan firms, Macroeconomics and Finance in Emerging Market Economies, *Sloan Management Review*, *49*, 43-50.

Slovin, M., Sushka, M. & Ferraro, S. (1995), A Comparison of the Information Conveyed by Equity Carve-Outs, Spin-Offs, and Asset Sell-Offs, *Journal of Financial Economics*, 89-104.

Stiglitz, J & Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393- 410.

Stuart C. Myers & nicholas s. Majluf (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* Vol13, 187-221. North-Holland

Sufi, A., 2006. Information asymmetry and financing arrangements: Evidence from syndicated loans. *Journal of Finance*, forthcoming.

Teresa,Hogan and Elaine, Hutson, (2005). Information asymmetry and capital structure in SMEs: new technology-based firms in the Irish software sector. *Journal of Financial Economics*, 89-104

Tushabomwe-Kazooba, C. (2006). Causes of Small Business failure in Uganda: A Case Study from Bushenyi and Mbarara Towns. *African Studies Quarterly,* 8(4).

Uganda Bureau of Statistics (2012), Report on the Business Register Update 2011/12, (UBOS & PSFU)

Zuravicky, O. (2005), The Stock Market: Understanding and applying ratios, decimals, fractions, and percentages, The Rosen Publishing Group, Inc.