FACTORS LIMITING THE INTEGRATION OF CAPITAL

MARKETS IN EAST AFRICAN COUNTRIES

By

NDEGWA RACHEL MUTHONI

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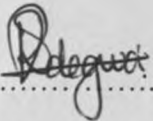
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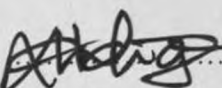
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Signed .... Date .... 15|11|2008 ....

NDEGWA, RACHEL MUTHONI

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This research work has been submitted for examination with my approval as the

University Supervisor

Signed .... Date ...... 18|11|2008 ....

MR. HERRICK ONDIGO

Department of Accounting and Finance

Faculty of Commerce University of Nairobi

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DEDICATION

To my dear parents Eutychus & Janet Karanja for planting the seed of educational quest in me and my daughter Samantha.

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ABSTRACT

Capital Markets in the East African Community (EAC) are underdeveloped with limited activity. This has constrained their ability to contribute maximally to the mobilization and allocation of long-term financial resources. The EAC has consequently recognized the limitations of a country-focused approach to developing capital markets and has placed substantial emphasis on the pursuit of a regional approach. The expectations are that a regional approach will: i) create the much-needed critical mass of demand and supply larger than can ever be achieved in individual countries; ii) enhance competition in the securities industry and lower transaction costs; iii) provide a framework for sharing information, expertise and experiences; and iv) provide a viable platform for linkages with more developed markets, both within Africa and beyond.

This study examined the factors constraining the integration of capital markets in East Africa. Macroeconomic factors, Policy framework, Legal and regulatory and external factors such as Political goodwill and multiplicity of regional blocs were identified as factors limiting integration process.

The study concluded that political goodwill is a major factor constraining capital market integration in East Africa. Thus efforts to integrate the three markets must be seen to lobby the political leadership of each country. Also, clear investor protection mechanisms must be seen to be in place so at to win investor's confidence across borders.

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LIST OF ABBREVIATIONS

ASEAN	-	Association of South East Asian Nation
BRVM	–	Bourse Regionale des Valeurs Mobilieres
CDSC	-	Central Depository Settlement Corporation
CMA	-	Capital Markets Authority
COMESA	-	Common Market of Eastern and Southern Africa
DSE	-	Dares Salaam Stock Exchange
EAC	-	East Africa Country
EASEA	-	East African Securities Exchanges Association
EASRA	-	East African Securities Regulatory Authorities.
EMU	-	European Monetary Union
ESM	-	Emerging Stock Markets
G7	-	Great 7 countries
GDP	-	Gross Domestic Product
ICAPM	-	International Capital Asset Pricing Model
KMO	-	Kaiser Meyer Olkin
MoU	-	Memorandum of Understanding
NSE	-	Nairobi Stock Exchange
OECD	-	Organisation for Economic Development and Cooperation
PCA	-	Principal Component Analysis
SADC	-	Southern African Development Community
SSA	-	South Saharan Markets
T-bill	-	Treasury Bill
UEMOA	-	West African Economic Monetary Union
UNCTAD	-	United Nations Conference on Trade and Development
USE	-	Uganda Security Exchange
WAEMU	-	West African Economic and Monetary Union
WTO	-	World Trade Organisation

CHAPTER ONE

1.0: INTRODUCTION

1.1.0: Background Information

The role of long term capital market in the economic development of a nation cannot be over emphasized. Levine and Zervos (1995) points out that the indicators of capital market development (market liquidity, capitalization, turnover and efficiency of pricing of risk) are correlated with current and future economic growth, capital accumulation, and productivity improvements.

A typical capital market comprises of the following institutions: banks, insurance companies, mutual funds, mortgage funds, finance companies and stock markets. A stock market is a financial institution where securities are bought and sold.

Pardy (1992) categorizes the functions of capital markets in an economy as allocation of capital and governance. The author recognizes that the broad functions of capital markets extend beyond mobilization of domestic financial resources to risk pooling and sharing among market participants as well as facilitation of international capital inflows. Equally important, though, are the governance functions of capital markets, and they manifest themselves in the form of information processing and aggregation, monitoring, and facilitation of efficiency based takeovers of companies.

Capital markets are primarily local markets, deriving the great bulk of their turnover from intra country trading. As markets grow and barriers fall, national markets are gradually being integrated into fledging global capital markets. Integration of capital market means that investors will buy and sell securities in any stock markets without restrictions; participants in capital market will freely offer their securities across borders and those identical securities will trade at essentially the same price across markets after foreign exchange adjustments (Mwenda, 2000).

If markets are completely integrated, assets possessing the same risk characteristics will have the same price even if they are traded on different markets. In completely integrated capital markets, investors face common and country-specific or risk, but price (identically in all markets) only common risk factors, because country-specific risk is fully diversifiable (Emiris, 1997).

According to a World Bank (2002) study, capital markets in the East Africa region have not been able to provide effective support for the private sector because they are small, underdeveloped and have limited activity. Although there are ongoing efforts in individual countries to alter this situation and expand capital markets, all the EAC countries have recognized the limitations of a country-focused approach and have placed substantial emphasis in the pursuit of a regional approach.

A study by Emerson (1989) showed that the creation of the single European market meant that European nations would have a higher degree of economic and financial integration. The objective of completing the internal Market was to eliminate all frontiers to the movement of goods, services, labour, and capital. Increasing capital flows on a regional basis may give rise to a convergence of equity market returns as they become increasingly driven by common factors and thus regional economic equilibrium is brought about at a faster rate.

Chang, Pinegar and Rayichandran (1994) investigated the degree of regional integration of Pacific Basin countries over the period 1986 to 1990 and found that a proportion of their returns can be explained by a common regional factor. According to Koenig (1996) massive capital inflows into the Association of South East Asian Nations (ASEAN) countries has made these nations to respond by implementing similar policy instruments through greater co-ordination of macro-economic policy such as sterilised intervention in the foreign exchange market and the tightening of fiscal stance.

Piesse and Hearn (2005) found evidence that national stock exchanges of the countries within the Southern & Eastern Africa, apart from South Africa, Botswana and Namibia

are not integrated by measuring the degree to which price volatility is transmitted across markets. The increased openness to efficient world markets, through the links they have with South Africa, has resulted in considerable benefits for neighbouring Namibia and Botswana. A system of regional groups that cluster around a more developed market may have widespread effects if these markets are found to be part of an effective network and hence integrated in a similar manner.

Mwanza, (2008) observes that the capital markets in the East African stock markets need to be demutualised first for easier integration. This means doing away with domestic practices which create barriers to entry and higher than warranted costs. Harmonizing legislation will also have to be considered.

Irving, (2005) argues that regional integration, if carried out at the right pace and in a pragmatic way, could improve the liquidity, efficiency and competitiveness of the Southern and eastern Africa region's exchanges. She stresses that cooperation and integration of national stocks in Africa could offer a way of overcoming some of the impediments to development that most face as relatively fledging and illiquid exchanges, inadequate market infrastructure and a small number of listing. According to her, possible benefits associated with regional integration of exchanges are diversified risk in a wider market, more efficient and competitive markets, lower costs, higher returns, and increased crossborder capital flows.

Yartey and Adjasi (2007) contends country specific institutions and economic conditions must be taken into account before undertaking the integration strategy, especially for developing countries. Thirty years ago, the seven French speaking countries of West African Economic and Monetary Union (UEMOA) signed a treaty to create a régional financial market. Twenty years later, a regional market was established. After extensive analysis and negotiations, the regional stock exchange ... BRVM was opened in 1998. Today BVRM has branches in each of the UEMOA countries and its headquarters in Abijan, Cote D'Ivoire. Current capitalization is just over US$ 1.4 billion and the average value of transaction at each trading session is about $ 500,000.

For the East African capital markets, the way forward is through the formation of strong regional blocs, which will then, ultimately, lead to a meaningful global agenda. Globalization and regionalization are not necessarily antagonistic, but rather mutually reinforcing. East African Capital Markets need to integrate with the rest of the world and, in doing so; they must first come together and establish their own regional blocs,

1.1.1 Brief History of the Stock Markets

i) Nairobi Stock Exchange

The Nairobi Stock Exchange was originally set up in 1954 as a regional exchange for Kenya, Tanganyika, Uganda, and Zanzibar. After these countries attained independence, the exchange became Kenya's national exchange and stopped servicing the other countries' markets.

As of June 2008 there are 55 equities and 7 corporate bonds , 3 of which have listed equities on the Nairobi Stock Exchange .The exchange has three market tiers: Main Investments Market Segment, Alternative Investment Market Segment, and Fixed Income Securities Market Segment.

The Nairobi exchange currently uses automated trading for both equities and fixed-income securities with delivery and settlement done through Central Depository & Settlement Corporation (CDSC). Settlement of trades is executed on a T+5 basis. The Nairobi exchange, the Capital Markets Authority of Kenya, the Association of Kenya Stockbrokers, the CMA Investor Compensation Fund and nine institutional investors have joined together as investors in the new Central Depository and Settlement Corporation (CDSC), which is the legal entity that own the CDS.

In the second phase of this automation project, the exchanges in Tanzania and Uganda will be linked to the Nairobi exchange's technology platform and the two exchanges are slated to each hold 2.5% stakes in the CDSC. The new CDS system, in conjunction with electronic trading, is expected to shorten the registration process, boost market liquidity

and trading activity, and reduce market risk on all three EAC member exchanges (NSE factbook, 2008)

ii) Uganda Securities Exchange (USE)

The Uganda Securities Exchange began operating in 1998 with the East African Development Bank's listing of a bond that matured in December 2001. The exchange has been trading equities since 2000.

As of June 2008, nine equity issues, six government bonds, and one corporate bond are listed on the Uganda exchange. Kenya Airways completed a dual listing on the Uganda exchange in 2002, making it the exchange's second regional listing, after East African Breweries (listed in 2001). The other companies with shares listed on the exchange are Bank of Baroda, Uganda Clays, multinational British American Tobacco, financial institution DFCU Group, New Vision Jubilee Holding Ltd (cross listed in 2006) and Stanbic Uganda. Since early 2004, 2-, 3-, 5-, and 10-year government bonds have been listed on the USE. There is one corporate bond, a five-year bond issued by Uganda Telecom, Ltd in 2003.

The exchange has three segments: Fixed Income Securities Market, Major Investment Market Segment (for large companies), and Alternative Investment Market Segment (for smaller companies). Trading is currently executed through an open outcry system and trades are settled on a T+5 basis. The Uganda exchange has harmonized listing, trading, and settlement rules and procedures with those of the Nairobi Stock Exchange and the three East African exchanges plan to set up an East African Central Depository System and electronic trading system (USE Annual Report, 2007)

iii) Dar es Salaam Stock Exchange

The Dar es Salaam Stock Exchange was set up in 1998. Trading is automated with settlement through the Central depository account. Settlement is on an electronic T+5 basis for equities and T+3 for bonds. The adoption of depository systems developed by

Kenya for the EAC region has gone a long way towards improving the Tanzanian exchange's market infrastructure and help to increase liquidity.

As of June 2008, there were nine equity listings on the exchange. In May 2003, the DSE liberalized its restrictions on cross listings to allow cross listings by companies based in EAC partners Kenya and Uganda. Kenya Airways was the first firm to crosslist on the DSE (in December 2004). Tanzania's tiny bond market is currently dominated by government issues. The Tanzanian government introduced two-year bonds in 1997 and then five- and seven-year bonds in 2002, in moves to lengthen the maturity profile of government debt. Two- and five-year bonds were first listed on the DSE in 2002, although only Tanzanian residents are eligible to invest in these instruments. As of early 2005, other than the Tanzanian government's bond listings, "corporate" bonds, issued by the East African Development Bank and BIDCO, were listed on the DSE. (www.darstockexchange.com)

iv) East Africa Community

The capital market regulatory authorities of Kenya, Tanzania, and Uganda entered into a Memorandum of Understanding (MoU) in 1997. This MoU sets out cooperation goals for the three countries' securities markets and set up the East African Member States Securities Regulatory Authorities (EASRA) as the coordinating regulatory body for capital market integration and cooperation. Article 80 of the 1999 Treaty of East African Cooperation recognizes EASRA and provides for harmonization of capital market policies and regulatory frameworks; promotion of cooperation and crossborder listing and trading among the three exchanges; and development of a regional rating system for listed companies.(EAC Secretariat,2001)

Rwanda and Burundi are formally incorporated into the EASEA, but initially as observers only for their capital markets are at infancy stage. With Rwanda opening an open 'over the counter' capital market in February 2008, leaves Burundi as the only East African country yet to set up a capital market. RSE was launched on January 31 2008 and has so far listed two 10 billion Rwandese Franc ($18.6 million) treasury bonds and one 5

billion Rwandese Franc corporate bond floated by the Banque Commerciale du Rwanda. (Musoke,2008).

As part of measures to develop a common capital market strategy for the sub region, East African Community (EAC) finance ministers agreed in 2001 to strengthen the EAC stock exchanges, to encourage crossborder listings, and to plan to develop a regional exchange with trading floors in each member state. To this end, the ministers pledged to implement legislation that would enable citizens of the EAC countries to be treated as residents in any of the three countries for the purpose of making investments. The ministers also agreed to liberalize capital accounts with respect to East African capital markets, as part of an effort to promote crossborder trade in stocks. Finally, the ministers agreed to encourage national governments to issue long-term bonds on their capital markets as benchmark securities for the private sector, as part of measures to support development of a debt securities market in the sub region. There has been notable progress in this latter regard, with the issue of 5-, 7-, and 10-year government bonds on the Dar es Salaam Stock Exchange since 2002, and the issue of 2-, 3-, and 5-year government bonds on the Uganda Securities Exchange since early 2004. (EAC Secretariat, 2001)

1.2 Problem Statement /
The member countries of the East African Community (EAC), Kenya, Tanzania and Uganda, have committed to the creation of an enabling environment within which the private sector can flourish and generate faster growth in individual countries. One of the pillars of this effort is the pursuit of financial development, with a view to maximizing the ability of financial sectors to mobilize resources and efficiently allocate them to the most productive sectors of the respective economies (Ndung'u, 2005)

According to World Bank, (2002) the principal component of financial sector development efforts in the EAC is the expansion of capital markets in the Community with the objective of developing long-term debt and equity capital for the private sector.

Basweti (2002) contends capital markets in the East African region have not been able to provide effective support for the private sector because they are small, underdeveloped

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and have limited activity. Although there are ongoing efforts in individual countries to alter this situation and expand capital markets, all the EAC countries have recognized the limitations of a country-focused approach and have placed substantial emphasis in the pursuit of a regional approach. It is expected that a regional market will ensure that capital markets fulfill their potential in providing long-term finance to support private sector activities in the East African region.

To this end, regional integration is seen as a useful component on the way forward towards global integration. It will help to overcome the disadvantages of small economic size, enhance export competitiveness, minimize adjustment costs and provide an effective framework for financial sector, legal and regulatory reforms, investment promotion and implementation of sectorial policies among others (Obstfeld, 1997)

In view of this, it is necessary to identify and analyze specific factors limiting the integration of Capital Markets in East Africa so as to make necessary policy recommendations. Thus, this study is aimed at addressing this question *"What are the constraints hindering the integration of capital markets in East African Countries?"*

1.3 Objectives of the Study

The main objective of the study was to determine the factors limiting the integration of capital markets in East Africa.

1.4 Importance of the Study

This study is of significant to the following:

i) Academicians and Researchers:

This study will add new insights and understanding to existing body of knowledge on capital market integration and lay a firm foundation for future scholarly pursuits on capital markets.

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ii) Policy Makers

The research will provide East Africa Securities Exchanges Association (EASEA), EAC, and individual East Africa countries Capital Markets with information necessary for implementing institutional framework important to accelerate their growth and development.

iii) Investors

The study will also assist investors with an opportunity of knowing the market's future prospects. This will enable them make appropriate investment decisions.

iv) Governments

This study will help governments in formulating policy issues affecting trade and enhancing cooperation with their partners.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

As noted in the background information of this study regional integration of national capital markets has not yet been realized. It is therefore important that we review the related literature to this study with a view of identifying the factors limiting the integration of capital markets of East African countries.

2.1 Regional Integration of Capital Markets

There is an increasing consensus that equity markets have a positive role in financial development and economic growth. Over the decades links between financial development and economic growth have been explored, however, going back at least to Schumpeter(1911), who argued that financial intermediaries play an essential role in fostering technological innovation and growth in an economy by mobilizing savings, monitoring firm managers, evaluating projects, managing and pooling risks and facilitating transactions. An efficient financial system may increase investments and improve its allocation, thereby having positive effects on growth.

Leachman, Francis and Marcott (1994) discover that greater co-movements between G7 countries' stock markets have occurred since the abolition of the Bretton-Woods pegged exchange rate mechanism. They find that the process of capital market integration is resulting in faster acceleration to achieving equilibrium. Recent studies such as Buckberg (1995) have focused upon the conformity of emerging stock markets (ESMs) to an international capital asset pricing model (ICAPM). Buckberg finds that ESMs have become more integrated with the world market portfolio since 1983 as a result of the reduction in the barriers to investing in them. This result is reinforced by the work of Korajczk (1996). For developed markets Brocato (1994), using a variance decomposition method, discovers strengthening inter-market linkages throughout the 1980s.

Cashin, Kumar and McDermott (1995) have conducted preliminary work on regional integration of stock markets. By using an impulse response methodology they find that

both intra-regional and inter-regional linkages across national stock markets have strengthened in recent years. In addition they discover that cross-country contagion effects of country-specific shocks dissipate over a period of a few weeks while the contagion effects of global shocks take several months to dissolve.

According to Johnson, Lindvall and Soenen (1994), regional integration of national stock markets can be brought about by the dismantling of barriers to capital flows on a regional basis. For instance, the interdependence of European equity markets is a result of macro economic integration of nations that are members of the European community. A key contributing economic policy that has caused this phenomenon was the removal of exchange controls during the 1980s and the establishment of common criteria associated with entry into the European common currency system.

Bakaert (1995) suggests that part of the move towards greater integration is driven by the wave of deregulation across most of the developing countries. Liberalization of these financial markets has resulted in greater flows of capital across countries. The greater flow of capital across countries is also associated with the growing importance of institutional investors who are both willing and able to invest internationally.

A parallel can be drawn for Asia as for Europe. For example, Chang, Pinegar and Rayichandran (1994) investigated the degree of regional integration of Pacific Basin countries over the period 1986 to 1990 and found that a proportion of their returns can be explained by a common regional factor. In the wake of massive capital inflows into the Association of South East Asian Nations (ASEAN) countries, these nations have responded by implementing similar policy instruments through greater co-ordination of macro-economic policy such as sterilized intervention in the foreign exchange market and the tightening of fiscal stance (Koenig, 1996). Many of the ASEAN countries have liberalised their financial markets by removing barriers to capital flows which has led to a convergence in the rates of return between countries (Faruqee, 1992). This has led to a higher degree of regional integration of financial markets in South East Asia. Indeed, the

1997 and 1998 financial crisis in Asia seemed to be transmitted initially on a regional basis before percolating through global capital markets.

In proposing a regional exchange for COMESA countries, Mwenda (1999) also recommends that the countries should work towards harmonizing their monetary and fiscal policies. Mwenda underscores that forging ahead on integration of COMESA member stock exchanges would require that this plan be considered an integral part of the overall political and economic integration agenda.

In setting out a list of recommended conditions for "successful regional stock exchange cooperation" in a recent UNCTAD Discussion Paper, Alvarez and Kalotay (2004) also emphasize the importance of harmonizing regulations and standards intraregionally while maintaining some slight differences in national rules where necessary and appropriate. This approach is, of course, akin to the principle of mutual recognition—restricting harmonization to the essential requirements-often referred to as one of the cornerstones of the single European market. Citing intraregional capital account convertibility at the top of their list of recommended preexisting conditions at the public level, Alvarez and Kalotay (2004) endorse some additional facilitators and conditions at the private level, including creation of regional instruments and regional country funds.'

Regionalism has thus emerged as a powerful catalyst for the multilateral trading system. Indeed, recent studies by the Organisation for Economic Development and Co-operation OECD, (1995) and World Trade Organisation WTO, (1995), regional trading agreements complement multilateral trade by developing new methods of liberalisation. There has been a recent trend to strengthen regional trade agreements in terms of non-border barriers such as standards, competition policy and investment rules, which are more difficult to negotiate and implement within a multilateral framework (Lloyd,1995). Hence, 'regionalism' as opposed to 'multilateralism' with respect to trade may dominate in the future.

2.2 Benefits of Integrated Regional Market

Markowitz (1952) contends effective diversification of portfolios can maximize returns/risks ratios. The dominance of an efficient frontier derived using international assets over frontiers where the opportunity set is confined to a particular market is expected. Empirical studies conclude that international diversification pushes out the efficient frontier, thus allowing investors to reduce risk and increase returns. The rationale being, firstly, profitable investments are possible in an enlarged universe because faster growing economies create higher returns, secondly advantages of international diversification may occur because companies in different countries are subject to divergent cyclical economic fluctuations.

Grubel 1968, Levy and Sarnat 1970 shows the potential profits from international diversification. Grubel, (1968) studies stock market indices of eleven industrialised countries and finds huge diversification potential. A typical investor in New York Stock exchange, for instance could increase his annual return by 68% while keeping his risk exposure constant if he invested in international markets. Using Markowitz efficient frontier, Levy and Sarnat (1970) shows that inclusion of emerging countries in the group of investment opportunities heightens the gains of an international investor.

International financial markets allow residents of different countries to pool various risks, achieving more effective insurance than purely domestic arrangements would allow. Furthermore, a country suffering a temporary recession or natural disaster can borrow abroad. Developing countries with little capital can borrow to finance investment, thereby promoting economic growth without sharp increases in saving rates. At the global level, the international capital market channels world savings to their most productive uses, irrespective of location. For example, producers who can diversify risks in financial markets may undertake more high-yield but risky investments, increasing average rates of economic growth. In that case the welfare gains can be enormous (Obstfeld, 1994).

Irving (2005) Cooperation and integration of capital markets in eastern Africa could offer a way for these markets to overcome some of the obstacles constraining their development. Possible benefits associated with regional integration of exchanges are diversified risk in a wider market, more efficient and competitive markets, lower costs, higher returns, and increased crossborder capital flows. By pooling the resources of fledgling and fragmented capital markets, regionalization could boost liquidity and the ability of these markets to mobilize local and international capital for private-sector and infrastructural development. Investors would gain access to a broader range of shares; issuers would gain access to a larger number of investors. There may also be a role for a well-functioning regional exchange in preventing large capital outflows from the region.

Mwenda, (2000) argues integration has the potential for further stimulating capital market development and increasing liquidity. Floating major enterprises on stock markets can help develop otherwise thin markets by attracting foreign capital. This, in turn, could encourage more indigenous companies to list.

Okeahalam, (2001) observes the progress toward integration of capital markets on a regional basis may actually help spur accelerated economic integration goals in other areas. For example, the harmonization of stock market regulations and trading practices that would accompany any regionalization of exchanges could deepen regional integration more broadly in policy areas such as taxation, accounting standards, corporate governance, and legal practices.

Obstfeld, (1997) observes that the gains countries have realized from international capital mobility are enormous. Historical evidence is suggestive of substantial benefits, however, notably for smaller countries, which are likely to gain the most from trade. Norway borrowed as much as 14 percent of gross domestic product in the 1970s to develop its North Sea oil reserves. Portugal borrowed as much as 17 percent in the early 1980s to modernize its economy; the country was chosen in May as a founder member of the European Union's economic and monetary union (EMU). Preliminary forecasts by the Organization for Economic Cooperation and Development put Poland's 1998 and 1999

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foreign borrowing at around 6 percent of GDP. Strong foreign investment inflows have fueled falling unemployment and a high rate of capital accumulation.

Irving, (2005) points out that regional integration of capital markets, if carried out at the right pace and in a pragmatic way could improve the liquidity, efficiency, and competitiveness of the East and Southern Africa region's exchanges, thereby enhancing their ability to mobilize local and international capital for development. Too early a move to an integrated stock market could merely create a large, illiquid market depending on the liquidity and development levels of existing national markets and the extent to which regulatory and tax policy frameworks have been harmonized.

2.3 Empirical Literature on Capital Market Integration

Korajczyk, (1995) Capital market segmentation prevents cross-market arbitrage and, therefore, prevents the prices of risk (the vector λ) from being equated across markets. This will lead to pricing errors relative to risk factors constructed assuming capital market integration. To illustrate this, consider a hypothetical world consisting of two markets (a and b) that are influenced by the same single world factor. That is, assets in each economy satisfy a one-factor pricing model. However, since the markets are segmented the parameters of the asset pricing model are different across markets. Assume that the realized returns on securities are given by the following linear factor model:

$$\mu^a{}_{j,t} = \lambda^a{}_0 + b_{j,t}\lambda^a{}_1$$
$$\mu^b{}_{j,t} = \lambda^b_0 + b_{j,t}\lambda^b_1$$

with $\lambda^a_0 - \lambda^b_0$ and $\lambda^a_1 - \lambda^b_1$.

Where by
μ^a is the price of asset j in economy a at time t
μ^b is the price of asset j in economy b at time t

However, the implied riskless return and world factor risk premium estimated by pooling the two markets together and assuming that they are integrated will be(assuming the markets are of equivalent size) $\bar{\lambda}_0 = \left(\lambda_0^a + \lambda_0^b \right)/2$ and $\bar{\lambda} = \left(\lambda_1^a + \lambda_1^b \right)/2$. This implies that for assets in economy a, the measured pricing deviation (relative to a model estimated assuming integration) of asset j is

$$\alpha_j^a = \left(\lambda_0^a - \bar{\lambda}_0 \right) + b_{j,1} \left(\lambda_1^a - \bar{\lambda}_1 \right)$$

and for assets in economy b, the measured pricing deviation of asset j is

$$\alpha_j^b = \left(\lambda_0^b - \bar{\lambda}_0 \right) + b_{j,1} \left(\lambda_1^b - \bar{\lambda} \right)$$

Thus, the mispricing parameters, a, provide a direct measure of deviations from the law of one price.

Groenweold, Tang and Wu (2004) use co integration and VAR analysis to determine interrelationships between stock market indexes in greater China (Shanghai and Shenzhen together as Mainland China, Hong Kong and Taiwan) in the time span of 1992-2001. The results show a high degree of isolation of Mainland Chinese markets from the other two, with no interrelation found, while some linkage exists between Taiwan and Hong Kong. The link between the Mainland and the other two markets remains insignificant in both pre- and post-Asian crisis subsamples.

Meric et al. (2006) use rolling correlations and principal component analysis (PCA) to determine the integration of 7 Latin American economies in a sample of 1995-2005 weekly returns on stock market indexes. On the side, he performs a PCA analysis including the Latin American countries together with 7 major developed stock markets and 19 emerging stock markets. The results are hard to interpret, due to a lack of relevant details. Meric (2006), claims to find a common emerging-Asian component with which China exhibits some comovement, while Russia seems to co-move with the large emerging Europe countries.

Kozluk (2008) conducted preliminary work on regional integration of capital markets using simple correlation to establish degree of integration of the China and Russia capital markets by looking at the co movement .He considered markets to be the more integrated, if the markets are driven by common forces. He made a distinction between two types of co movement namely: - comovement in measured market returns and comovement in volatility. From a sample of 2006-2007 data, the Chinese markets show coefficients of around 20-30%, slightly higher with South East Asia, while the Russian markets show correlations of almost 60% with world markets on average and slightly higher values with Europe, suggesting some regional links.

Simple correlation coefficients, illustrative as they are, are unable to separate the degree of co movement common in the global, regional, emerging market or commodity producer dimension. In order to achieve the above, factor analysis would be used for it allows one to identify the influence of common, mutually independent forces.

2.4 Factors Limiting Regional Integration
Some of the factors limiting regional integration of capital markets include the following:-

2.4.1 Market Imperfections
Bekaert and Harvey (1995), Razin, Sadka and Yuen (1996), asserts global integration of financial markets is hampered by market imperfections such as taxes, transaction costs, political risks and capital controls which leads to market failure with respect to the allocation of capital across international frontiers.

Leachman, Francis and Marcott (1994) points out that greater co-movements between G7 countries' stock markets have occurred since the abolition of the Bretton-Woods pegged exchange rate mechanism. Recent studies by Buckberg (1995) have focused upon the conformity of emerging stock markets (ESMs) to an international capital asset pricing model (ICAPM). Buckberg finds that ESMs have become more integrated with the world market portfolio since 1983 as a result of the reduction in the barriers to investing in them.

Faruqee (1992) contends that many of the ASEAN countries have liberalised their financial markets by removing barriers to capital flows which has led to a convergence in the rates of return between countries. This has led to a higher degree of regional integration of financial markets in South East Asia. Indeed, the 1997 and 1998 financial crisis in Asia seemed to be transmitted initially on a regional basis before percolating through global capital markets,

2.4.2 Macroeconomic Environment

Although the macroeconomic environment in the EAC has improved substantially in recent years, there are some developments that might obstruct the orderly development of capital markets. Inflation rates vary across the three east African countries, a situation which is not conducive to the holding of long-term financial assets. Also, Tanzania and Uganda have both recorded fairly robust economic expansion in recent years, with real GDP growth rates averaging 4.7% and 5.6% respectively over 1997-2002. In contrast, there has been poor output performance in Kenya, with GDP growth averaging 1.4% over the same period. This has dampened the demand for equities in the EAC's biggest capital market and substantially limited its ability to be an engine of growth for the much smaller and much younger markets in Tanzania and Uganda (World Bank, 2002)

Relatively high real short-term interest rates in the EAC have also reduced the demand for capital market instruments, although the situation has been reversed somewhat in Tanzania. Treasury bill (t-bill) rates in Kenya stood at 12.6% at end-2001, compared to an inflation rate of 3.9%, although provisional 2002 figures show a decline to 8.9% versus an inflation rate of 5%. T-bill rates in Uganda were at 11.4% in 2002, compared to a negative inflation rate of –1.8%. This situation has produced some crowding-out, with substantial domestic savings diverted into short-term government securities. A similar situation existed in Tanzania until 2001, when t-bill rates fell sharply to 4.1% and this fall has been accompanied by a marked increased in the demand for both equity and debt instruments (World Bank, 2002).

2.4.3 Political and Control Risk.

When one invests in foreign stock market, ones money is under another jurisdiction and one is a foreign investor, who might be treated differently from domestic investors (for

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better for worse). Although many think of nationalization and expropriation as a major manifestation of political risk, these acts are rare: instead governments exert their sovereignty by restricting companies activities, by taxing them in one form or another and under pressure, perhaps by restricting the outflow of capital that has been invested.

One problem that has hindered successful stock market integration is nationalistic politics. African governments tend to view stock exchanges as national assets with pride just like national airlines (Moss, 2003). As a result, they are uncomfortable with transformations which lead to a reduction in the national touch. In addition, smaller economies tend to perceive the bigger economies as being domineering and fear that their exchanges will be overshadowed by the bigger exchanges with integration. These economies also fear that capital may be diverted away from them to the bigger economies with integration. Okeahalam (2001) reports that Botswana officials were uncomfortable with South Africa's virtual African exchange proposal due to the fear of capital flight towards JSE.

Political uncertainties, such as the continuing conflict in the Democratic Republic of Congo and Great Lakes region, also have adverse effects on investor confidence (Central Bank of Swaziland Annual Report, 1999-2000), as does the ongoing political unrest in Zimbabwe.

2.4.4 Illiquidity and Thin Trading

Piesse and Hearn (2005) points out slow progress in market development and related infrastructure, and a shortage of investment options have exacerbated the general illiquidity of South Saharan markets (SSA). Historically, African markets have offered a limited, narrow range of products, with the principal role of the financial sector being to provide a source of domestic funding to offset the governments' budgetary deficits. This had the major disadvantage of crowding out trading activity by government, which left a very low level of new capital raised through private enterprise. Common factors still inhibiting market development are inadequate legal protection for investors and creditors, and poor supervision, monitoring and regulation. SSA equity markets continue to be characterized by low ratios of market capitalisation to GDP

Piesse and Hearn (2005) contend that other constraints on liquidity are a function of trading practices. Exchanges in South Saharan Africa have limited trading hours and are closely time synchronous with other regional markets. There is generally little domestic stock market culture and awareness, and traditional domestic preferences for physically held commodities as a source of wealth, such as cattle remain. Trading in the majority of markets is overwhelmingly dominated by a handful of stocks, even if more securities are actually listed, and bulk trading of a limited number of stocks in the smaller exchanges hinders activity on the domestic markets. Weakness in broker capitalisation also has adverse effects, reducing the ability to respond to arbitrage profits resulting from price differentials between rival stock markets in the case of dual listed securities – a common practice in developed markets.

2.4.5 Multiplicity of Regional Blocks

Mwabesa, (2006) asserts market participants are subject to multiple regulators when they operate in different countries in a region, they are likely to face regulatory uncertainties, complexities, and increased costs, both directly in having to comply with multiple regulatory regimes, and indirectly in having to pay for the many regulators. These · problems may be evident in all areas subject to regulatory oversight, and by all types of market participants.

He points that Kenya and Uganda are members of COMESA and EAC while as Tanzania is member of EAC and SADC.

2.4.6 Currency Convertibility

Yartey and Adjasi (2007) contend that an integrated exchange with a multiplicity of inconvertible currencies only compounds the administrative costs which integration itself seeks to remove. The advantages of having existing monetary unions, like the WAEMU in the case of the BRVM preclude such problems. Africa has many currencies, few of which are convertible within the continent. Indeed currency convertibility depends more on trade density between two countries and cannot be forced. This thus places hurdles on the way of regional exchange integration efforts

2.4.7 Legislative and Regulatory Impediments

Irving, (2005) points out integration requires that there are harmonized legislation, rules, listings, trading days, settlement, and reporting standards. This implies that for African stock markets to become integrated, the various national exchanges must adopt and/or harmonize their existing rules and systems. Even if trading rules and listing requirements are harmonized there is the issue of accounting and reporting standards. These standards tend to be based on national systems which in turn also depend on the colonial history of the countries. For instance, the BRVM comprises of countries which adopted common standards following their common colonial past.

The presence of a securities regulator is important in this regard to ensure enforcement. Such enforcement can also be complimented by effective private laws on contracts and dispute resolutions (Lopez-de-Silanes, 2004). The presence of strong corporate governance mechanisms also help boost investor confidence in regulatory issues. Strict ethical and conduct of business rules could be developed for members of African stock exchanges. Rules must follow international best practices but at the same time reflect local structures and needs. Emerging African markets should also implement rules that are "necessary" rather than what would be "nice" (Friedman and Grose, 2006). In Africa though, there are laws and rules for regulation and supervision. The real challenge is the shortage of experienced supervisors and the absence of a strong tradition favoring compliance with the rules and discouraging regulatory forbearance (Vittas, 1998).

A great deal of attention has been given to market integration in the literature, although this has previously been confined to emerging markets in Latin America and Asia-Pacific. However, those Africa have been largely ignored, perhaps not surprisingly, since in generally, these markets have been established only recently. In East Africa, the capital market has achieved minimal integration to date, with three cross listings to date. The prosperity of these cross border listing should be encouraged. However, it will not only lead to lower prices for all financial services, but also enhance risk- return frontiers for investors who previously faced restricted opportunities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Research Design

A descriptive design was used in the study. Churchill (1991) notes that a descriptive study can be used when the purpose is to describe the characteristics of certain goods, make specific predictions or estimate proportions of people who behave in a certain way. Since the study was aimed at identifying constraints to capital market integration, the descriptive design was considered most appropriate.

3.1 Population

The population of study encompassed 175 firms of East Africa Stock Markets, all Capital Market Authorities, investment advisors/fund managers and dealers licensed in the East Africa countries. These were selected because of their involvement in the various E.A Capital markets and the difficulty to access real investors.

3.2 Sampling Procedure

A survey of the entire population would have been appropriate but because of limited time and resources, a convenient clustered sample of (50) fifty firms was considered adequate. This made it easy, less costly and yet representative to deliver the questionnaire for this study. To increase the responses, more questionnaires over the targeted sample were issued to stock brokers and fund mangers according to their presence in numbers.

The table below shows the representation of the sample that was targeted for the study based on the information obtained the various websites.

Table 3.0: Representation of sample

	Total Number	Number of firms to be included in the sample
NSE	1	3
USE	1	1
DSE	1	1
CMA	3	1
EASRA	1	1
EAC	1	1
Quoted Companies	67	10
Stock Brokers/Investment Advisors	76	18
Fund Managers	24	12
Total	**175**	**50**

Source: NSE 2008 factbook, USE website and DSE website

3.3 Data Collection

Primary data was collected by an exploratory survey method. A semi structured and structured questionnaire consisting mainly of close ended questions and based on a six point likert scale were used. A six point scale eliminates the clustering which is common for an odd numbered Likert scale (Strauss 1990). The close ended questions were appropriate as they provided a standard set of questions for all respondents. As the information sought was qualitative in nature only one questionnaire was administered to all respondents. The targeted respondents were chief financial officers of quoted companies and senior managers for the remaining respondents. The questionnaires were delivered to the respondents and collected at a later date. Interview method where possible was used. This was to increase the responses and seek clarification and enhance accuracy (Churchill 1987).

The questionnaire was made up of two parts: A and B. Part A captured the impediments of regional integration whileas part B captured the possible solutions thereof suggested by respondents.

3.4 Data Analysis

Collected data was summarized in tables and percentages, frequencies and subsequently mean scores calculated. Further, factor analysis was used to establish a ranking criterion. Principal component analysis using Varimax rotation and Kaiser Criterion was used to uncover the common constraints facing the market.

A similar study by Basweti (2002) used the data analysis techniques described above. The analysis was based on the factors limiting the development of the NSE by examining the two classes namely: External factors to include macroeconomic, political and cultural and Market factors to include Institutional, legal and regulatory factor

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1   Introduction

This chapter explains how the data·was analyzed and presented. Data was collected from the three East African counties of Kenya, Uganda and Tanzania. There were disparities in the response rates caused by logistical difficulties of obtaining the responses simultaneously from the three countries. Email was used to communicate to the identified Ugandan respondents while a Tanzanian based research assistant was identified to assist in the data collection. The data were analyzed by use of SPSS package to produce the descriptive statistics. The analysis of the data is presented in tables, pie charts, bar graphs as shown in the following sections.

Table 4.1: Respondents country of origin

	Frequency	Percent
Kenya	29	63.0
Tanzania	10	21.7
Uganda	7	15.3
Total	**46**	**100.0**

Source: Research Data

Table 4.1 shows the respondents' country of origin. It can be seen that majority (63.0%) of the respondents were drawn from Kenya while 21.7% were from Tanzania. Respondents from Uganda made up 15.3% of the sample. The lower response rate from Uganda was mainly because the questionnaire was emailed to the identified respondents to which a few responded.

The respondents were asked to state their view on how important they thought it was to integrate the capital markets of the three countries. Figure 4.1 below shows the responses obtained.

Figure 4.1: Respondents opinion on importance of integration

Legend: ◫ Not important ▪ Less important ▫ Important ▫ Very important

9%
30%
20%
41%
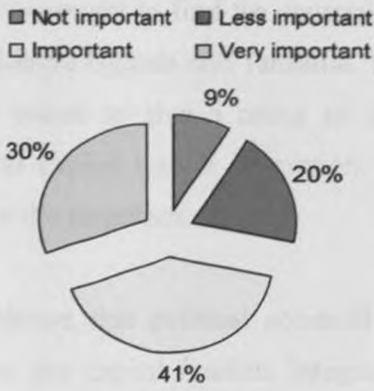
Source: Research Data

Results in Figure 4.1 show that majority (41%) of the respondents said it was important while 30% said it was very important to integrate the three capital markets in the East African countries. Only nine percent said it was not at all important to integrate the said Capital Markets. The findings show that majority of the respondents were in favour of the integration. Figure 4.2 below shows the respondents views clustered by country of origin.

Figure 4.2: Respondents opinion on importance of integration by country

Legend: ◫ Not important/Less important ▪ Important/very important

Kenya: 28, 72
Tanzania: 50, 50
Uganda: 0, 100

Percent (Y-axis: 0 to 120)
Country (X-axis)
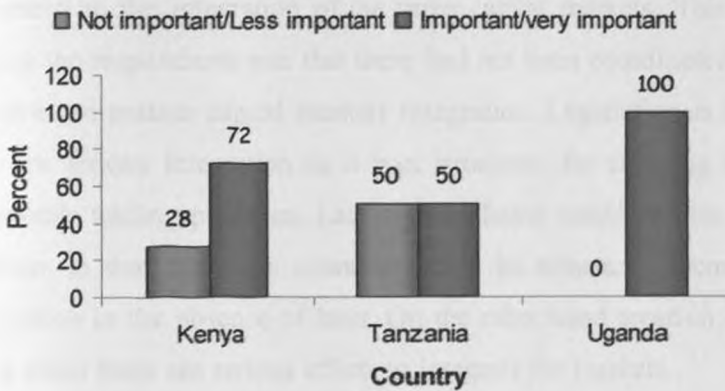
Source: Research Data

Findings in Figure 4.2 suggest that Ugandan respondents were all in favour of integration compared to 72% from Kenya and 50% from Tanzania. Tanzania respondents were found to be most wary of capital markets integration. The findings imply that the capital markets integration process if implemented was likely to face the greatest opposition from Tanzanians. The results also imply that Tanzanian investors may be most reluctant to trade in an integrated capital market.

4.2   Constraints to Capital Markets Integration

This objective sought to find the constraining factors to the integration of the capital markets in Kenya Uganda and Tanzania. The respondents were given a list of possible factors and asked to give a rating on how much the factors were deemed to be constraints to capital market integration. Mean rankings and standard deviations are used to show the responses.

Table 4.2 shows that political goodwill was rated to be the biggest (mean=4.89) constraint to the capital markets integration. The low standard deviation of 0.315 reiterates consensus among the respondents on this aspect. This shows that the respondents were unanimous that the integration of the East African capital markets was at the mercy of the political environment in the three countries. This is probably because the first instinct of the political leadership is to protect what it deems to be the interest of their country. Lack of political goodwill in this regard could therefore imply that there is lacking conviction to the individual states that capital markets integration would be beneficial to the respective economies and the citizenry.

Common laws to protect investors interest (mean=4.5) was also viewed as a major constraint to the integration of the three capital markets. This implies that the mood among the respondents was that there had not been coordinated legislation in the three countries to sustain capital markets integration. Legislation is important in paving the way for serious integration as it lays structures for ensuring fair play and it defines acceptable trading practices. Lacking legislation could be resulting in an egg-chicken problem in that the some countries could be reluctant in committing themselves to integration in the absence of laws. On the other hand creation of laws could only take place when there are serious efforts to integrate the markets.

Another highly ranked aspect related to legislation was said to be restrictive rules and regulations of the various Capital Market Authority (mean=4.33). The respondents therefore seemed to say that the rules governing the individual CMAs do not promote or anticipate trading by investors outside the residents in their countries. Integration of the three CMAs therefore has to start with adoption of common rules and standards in the respective capital markets. This will be the only way for ensuring a seamless integration of the three markets.

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Table 4.2: Rating of constraints to integration

Constraining factors	N	Mean	Std. Deviation
Political Good will	46	4.89	.315
Common laws to protect investors interest	46	4.50	.506
The restrictions of a foreigners holdings in a quoted company	46	4.46	.887
Restrictive rules and regulations of the various Capital Market Authority (CMAs)	46	4.33	.474
Lack of a Common currency	46	4.15	1.010
Absence a regional rating agency	46	3.98	.802
Restrictions on foreign investments and control	46	3.85	1.095
Requirements for cross border listing for companies	46	3.85	.868
The absence of central clearing and depository system (CDS)	41	3.78	1.235
Absence of common rating standards	46	3.76	1.015
The absence of uniform automated trading system	46	3.76	1.336
Differential inflation rates in East Africa countries	46	3.65	.795
Differential income levels in the region	46	3.52	1.150
Amount and content of information disclosed	46	3.30	1.030
Differential tax rate on dividends and interest income	46	3.22	.964
Different growth rates	46	3.13	1.470
Existence of multiple regional blocks	46	2.93	.952
Fluctuating Foreign Exchange rate	46	2.87	.833
Differences in trading days and hours	46	2.85	.942
Lack of depth and liquidity	46	2.83	.769
Lack of hedging instruments	46	2.70	.916
Weak Banking systems	46	2.65	.900
High transaction costs	46	2.57	1.328
Low income levels in the region	46	2.41	.956
Differences in accounting standards	46	2.39	.829

Source: Research Data

The restrictions of a foreigners holdings in a quoted company (mean=4.46) was said to be a constraint to integration. This is because countries set a limit on the level of foreign ownership in companies quoted companies. For instance Kenya sets the limit to a minimum of 30% local ownership. This implies that if the three countries were to maintain the same regulation, it would be impossible for foreign companies to trade in the integrated capital market without losing their ownership. This can be solved by redefining local ownership to mean the three East African countries.

Table 4.2 shows that differences in accounting standards (mean =2.39) and standard deviation of 0.839 was least viewed as a constraint to capital markets integration. This is most likely because there were no major differences in accounting standards that are foreseen in the three countries.

Low income levels in the region were also lowly regarded as a constraint to capital markets integration. This is most likely so because the respondents viewed capital markets integration as aiming to first and foremost diversify investment options before attracting new investment.

Table 4.3: Top five rated constraints in the each country

	Mean	Std. Deviation
Kenya		
Political Good will	4.83	0.38
Common laws to protect investors interest	4.48	0.51
Capital Market Authority (CMAs).	4.38	1.05
Lack of a Common currency	4.31	1.14
Restrictive rules and regulation of the various CMAs	4.17	0.38
Tanzania		
Political Good will	5.00	0.00
Differential income levels in the region	5.00	0.00
The absence of central clearing and depository system (CDS)	5.00	0.00
Restrictive rules and regulation of the various CMAs	5.00	0.00
Capital Market Authority (CMAs).	5.00	0.00
Uganda		
Political Good will	5.00	0.00
Common laws to protect investors interest	4.57	0.53
Absence of common rating standards	4.43	0.53
Absence a regional rating agency	4.43	0.53
Lack of a Common currency	4.43	0.53

Source: Research Data

Table 4.3 shows that political goodwill was regarded as a top constraint by respondents in the three countries. Kenyan and Ugandan respondents viewed common laws for protecting investor interest as the next major constraint. Tanzania respondents on the other hand seemed to be wary of inequalities in income levels in the three countries. This element seemed to trigger fears of dominance in their capital markets by non-Tanzanians.

4.3 Factor Analysis on Constraints to Capital Markets Integration

Factor analysis was used to investigate the factors that were viewed to be constraints to Capital Markets Integration. The table below shows the screening results testing the viability of using factor analysis.

Table 4.4: Communalities

	Initial	Extraction
Differential tax rate on dividends and interest income	1.000	.840
Political Good will	1.000	.982
Different growth rates	1.000	.950
Low income levels in the region	1.000	.997
Weak Banking systems	1.000	.805
Existence of multiple regional blocks	1.000	.964
Fluctuating Foreign Exchange rate	1.000	.978
Lack of hedging instruments	1.000	.954
Differential inflation rates in East Africa countries	1.000	.965
Differential income levels in the region	1.000	.923
Amount and content of on information disclosed	1.000	.956
Differences in trading days and hours	1.000	.989
Absence of common rating standards	1.000	.942
Absence a regional rating agency	1.000	.966
Lack of a Common currency	1.000	.951
High transaction costs	1.000	.917
Restrictions on foreign investments and control	1.000	.997
Lack of depth and liquidity	1.000	.978
Differences in accounting standards	1.000	.960
The absence of uniform automated trading system	1.000	.893
Requirements for cross border listing for companies	1.000	.990
Common laws to protect investors interest	1.000	.992
Restrictive rules and regulation of the various CMAs	1.000	.989
Capital Market Authority (CMAs).	1.000	.702

Extraction Method: Principal Component Analysis.

Source: Research Data

The table above shows commonalities before and after extraction. It can be seen that the after extraction are all above 0.7. Therefore the Kaiser criterion that a maximum of four components is extracted is therefore met.

Table 4.5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.739
Bartlett's Test of Sphericity	Approx. Chi-Square	135.361
	Df	45
	Sig.	.000

Source: Research Data

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy also known as the KMO statistic is a measure of whether factor analysis is suitable for this kind of data. The KMO values range between 0-1. A value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations hence factor analysis is likely to be inappropriate. On the other hand a KMO value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors. Values greater than 0.5 are generally acceptable. In this analysis, KMO is 0.739 which is good. Bartlett's test is highly significant ($p<0.001$) implying there are some relationships between variables and so factor analysis is appropriate.

Table 4.6: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.608	23.365	23.365	5.608	23.365	23.365	4.132	17.217	17.217
2	4.545	18.936	42.301	4.545	18.936	42.301	3.914	16.310	33.528
3	4.023	16.762	59.063	4.023	16.762	59.063	3.736	15.568	49.095
4	3.447	14.363	73.426	3.447	14.363	73.426	3.292	13.715	62.810
5	2.227	9.280	82.706	2.227	9.280	82.706	2.817	11.736	74.546
6	1.633	6.804	89.510	1.633	6.804	89.510	2.773	11.556	86.102
7	1.098	4.574	94.084	1.098	4.574	94.084	1.916	7.981	94.084

Extraction Method: Principal Component Analysis.

Source: Research Data

The table above shows the eigen values associated with each of factor before extraction, after extraction and after rotation. It can be seen that factor 1 explains 23.4% of the total variance and that the first seven factors explain 94.08% of the total variance. Upon extraction of factors with eigen values greater than 1, seven components were left. The table below shows the factor loadings of the each variable to the factors. Variances below 0.4 were suppressed.

Table 4.7: Rotated Component Matrix

	Component						
	1	2	3	4	5	6	7
Different growth rates	.956						
Low income levels in the region	.809						
Fluctuating Foreign Exchange rate	.733	.404					
Differential income levels in the region	-.719		-.422				
Lack of a Common currency	-.620	.436				.424	
The absence of uniform automated trading system		-.942					
Lack of hedging instruments		.926					
Restrictive rules and regulation of the various CMAs		-.653	.632				
Weak Banking systems		.538					.405
Requirements for cross border listing for companies			.923				
Restrictions on foreign investments and control			.731		-.462		
Restrictions of foreigners holdings in a quoted company			.702				
Differential tax rate on dividends and interest income			.646				
Lack of depth and liquidity			.571	.430	-.404		
Absence of common rating standards				.962			

Differences in accounting standards				-.814	.429			
Differential inflation rates in East Africa countries				.728				.412
Absence a regional rating agency		.408		.583	.451	-.441		
Differences in trading days and hours					.903			
Common laws to protect investors interest					-.817			
High transaction costs						-.876		
Amount and content of on information disclosed						.756		
Political Good will	.532	-.479				.658		
Existence of multiple regional blocks								-.895

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

A Rotation converged in 22 iterations.

Source: **Research Data**

The rotated factor matrix above shows that the constraints that that load highly into component 1 seem to be macroeconomic differentials between the three countries. These are Different growth rates, Low income levels in the region, Fluctuating Foreign Exchange rate and Differential income levels in the region. Tanzania and Uganda have both recorded fairly robust economic expansion in recent years, with real GDP growth rates averaging 4.7% and 5.6% respectively over 1997-2002. In contrast, there has been poor output performance in Kenya, with GDP growth averaging 1.4% over the same period. This has dampened the demand for equities in the EAC's biggest capital market and substantially limited its ability to be an engine of growth for the much smaller and much younger markets in Tanzania and Uganda.

The constraints that load highly to component 2 seem to relate to the differentials in the capital market development in the three countries. The factors loading on this aspect are the absence of uniform automated trading system and Lack of hedging instruments. With 55 companies listed, the Nairobi Stock Exchange (NSE) is relatively small, but robust compared to the Uganda Security Exchange (USE) and Dar es Salaam Stock Exchange (DSE), which has less than 10 firms listed. The NSE operates five days a

week while the USE and DSE operate for three days. This may lead to historical prices being used and may give false information or cause an information imbalance in the market.

The constraints loading to component 3 relate to differences in policy and regulatory framework directing the actual trading at the stock market. Among the constraints featuring on this aspect are Requirements for cross border listing for companies, Restrictions on foreign investments and control, Restrictions of foreigners' holdings in a quoted company and Differential tax rate on dividends and interest income. All the three stock markets need to be demutualised first for easier integration. This means doing away with domestic or regional monopolistic and oligopolistic practices which create barriers to entry and higher than warranted costs. The currently cross listed companies have to comply with all the three securities markets regulations. They are thus likely to face regulatory uncertainties, complexities, and increased costs both directly and in having to comply with multiple regulatory regimes and indirectly in having to pay for the many regulators. Harmonizing legislation will also have to be considered, for example, differences in bankruptcy regimes, restrictions on ownership by non-nationals, the imposition of national rules to protect national industries, requirements to establish local companies, restrictions on issuers, intermediaries and investors in providing cross-border services (Mwanza, 2007)

Component 4 relates to differences in reference institutions/standards. The constraints loading on this component are absence of common rating standards, differences in accounting standards and differential inflation rates in East Africa countries. Accounting differences can hinder market participants' abilities to compare financial statements. Improving accounting and financial reporting practices and procedures would help more companies qualify for a listing, while improvements to governance—at all levels—would help build public confidence and encourage more investors to invest in companies' shares.

Component 5 relates to differences in operational controls (hours and days of business). This anticipates differences such as public holidays that are not common to the three countries as well as the disparate trading hours. In order to carry out and clear crossborder trading to take place efficiently, electronic trading, clearing, and settlement

systems must be synchronized. Technology in use on the national exchanges seeking to integrate operations must be harmonized: if the systems used across the exchanges are not identical, they must at least allow for an efficient, uninterrupted flow of information across borders. This requires an upgrade of the technology used by smaller exchanges in particular. As a prerequisite for integration, national markets need to be automated to enable real-time investment decisions.

Component 6 highlights the concerns about the cost of doing the actual transactions. The factors loading to this include high transaction costs, amount and content of information disclosed and to some extent lack of a common currency. Without a common currency, efforts to regionalize stock markets would be impeded. At any rate, there would be a need to overcome the obstacles associated with crossborder trades carried out in different currencies. Countries participating in crossborder trades must have convertible currencies and liberalize exchange controls and other restrictions on crossborder capital movements in order to facilitate crossborder payments and transactions settlement

Existence of multiple regional blocks and political goodwill seemed to be the only factor loading highly on component 7. National leaders have a pivotal role to play in rallying the political will needed to push through and implement national reforms and harmonization of policies in finance and other strategic sectors. Policymakers pursuing regional cooperation and eventual integration often will have to confront and overcome cultural and language obstacles that are associated with shared systems and processes, as well as nationalist sentiment that may arise because stock exchanges are often viewed as symbols of national sovereignty

4.4 Suggested Solutions to Integration Constraints

The study asked the respondents to give suggestions to overcoming the constraints to integration of the East African capital markets. Table 4.8 below shows the mean rankings and the standard deviations obtained.

The top rated solution for mitigating integration constraints was said to be more investor protection mechanisms (mean = 4.91). This shows that the respondents most highly regarded guarantees of investor protection in an integrated capital market.

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Perhaps the case of collapsed stock brokerage firms in Kenya in which many retail investors lost their investment brings this aspect to light. Protection mechanisms could for instance include guarantees by governments on investments made by citizens of other countries to stock brokers registered in their countries. This can include strict procedures to ensure fair play by all those involved in handling investor funds.

Table 4.8: Solutions to integration constraints

	N	Mean	Std. Deviation
More investor protection mechanisms	46	4.91	.285
Joint Central Depository System	41	4.78	.419
Creation of a Supra-Regional capital-market institution	41	4.68	.471
Adherence of International Standards	46	4.11	.567
Inclusion of the private sector in integration process	46	4.07	1.162
Promotion of sound institutional investor base.	46	3.91	.985
More linkages with other Stock Markets	46	3.72	1.026
Regional rating services	46	3.61	.906
Privatization of companies	46	3.50	.506
Streamline and Simplification of prospectus requirements.	46	3.28	1.004

Source: Research Data

The respondents also called for a joint Central Depository System (mean=4.78) as a solution to hastening capital markets integration. This seemed to suggest that a common platform for trading was prerequisite to capital markets integration. This suggests that the individual capital markets can lay ground for integration by instituting common platforms and standards in their individual markets.

Inclusion of private sector in integration process was suggested (mean =4.07). Private sector participation, as opposed to just regulators, central banks and other public institutions normally has the best incentive to determine whether the expenditure on a particular integration scheme for market infrastructure is worth investing in. However, it must not be forgotten that the prerequisite for capital markets to flourish is that the governments need to create a deep and liquid bonds market that will encourage investment.

CHAPTER FIVE

SUMMARY OF CONCLUSION AND RECOMMENDATION

5.1   Introduction

This chapter gives a summary of the study findings. It also presents the recommendations, conclusion and areas for further research.

5.2   Summary of Findings

The summary of findings is as follows:

- Forty one percent of the respondents said it was important while 30% said it was very important to integrate the three capital markets in the East African countries. On the other hand, nine percent said it was not at all important to integrate the said Capital Markets.

- The findings have shown that Ugandan respondents were all in favour of integration compared to 72% from Kenya and 50% from Tanzania. This implies that Tanzania respondents least valued the integration of the East African capital markets.

- The respondents strongly agreed that (mean=4.89) political goodwill was biggest constraint to the capital markets integration. The low standard deviation of 0.315 reiterates consensus among the respondents on this aspect. This shows that the respondents were unanimous that the integration of the East African capital markets was at the mercy of the political environment in the three countries.

- There was high consensus among the respondents in agreement that common laws to protect investors interest (mean=4.5) was constraint to the integration of the three capital markets. This implies that the mood among the respondents was that there had not been coordinated legislation in the three countries to sustain capital markets integration.

- Factor analysis showed that the constraints to capital market integration could be described by seven components. These are differentials in the economic status/economy, differentials in the capital market platform, to policy and regulations pertaining to the actual trading at the stock market, differential in standards, differences in hours/days/periods of business, concerns about the cost of doing the actual transactions and existence of multiple regional blocks .

5.3   Conclusion

The results have shown that political goodwill was reported by respondents in the three countries to be the major constraints affecting capital markets integration. Thus efforts to integrate the three markets must seek to lobby the political leadership in the individual countries. Lack of clear protection mechanisms for investors was also said a constraint to capital markets integration. The countries must therefore seek to guarantee protection of investments. The rules and regulations governing integration therefore need to be formulated and clearly spelt out. Integration may also demand for a common trading platform. Respondents agreed that formulation of establishment of a joint central Depository Fund could bolster integration efforts.

5.4   Recommendations

The study makes the following recommendations:

- Political goodwill was said to be the biggest constraint to capital markets integration. It is recommended that sustained efforts by the business community be made to lobby the political leadership to remove the hurdles to capital markets integration. Such efforts should be backed with evidence of benefits that would be accrued in the integration and how the citizens in the three countries would be protected. .

- The three countries need to come up with common laws that would govern the integration and subsequent trading in the capital markets. The East African legislative assembly needs to lead such initiatives before fine-tuning and adoption by the respective countries.

- The integration of the capital markets should target the expanded East African that includes Rwanda and Burundi. This is can be result in a larger trading block with a vibrant capital that will be attractive to international investors.

- The three capital markets should embark on efforts to foster integration. They can for instance seek to establish common standards for trading that include a common information technology (IT) platform. This way they will prepare the ground for a seamless integration besides making integration more envision-able.

- The restrictions of a foreigners holdings in a quoted company (mean=4.46) was said to be a constraint to integration. It is recommended that the three countries

redefine local ownership to apply to the combined citizens in the countries in the integrated market.

5.5 Limitations of the Study

A limitation of the study was the use of convenient sampling technique rendering the sample size not representative of the population. Other limitations include; time and financial resources' constraints needed to undertake a rigorous study. To collect the needed information from the three markets demanded ample time. A few corporate officials treated filling in the questionnaires a waste of their valuable time. However, the positive responses received proved valuable.

5.6 Suggestions for Further Research

The study on the constraints to integration of the capital markets involved the stakeholders in the equity market who were considered to be knowledgeable on the issues raised. It is recommended that a similar study be carried out involving the citizens in the three countries. Such findings would capture the mood of the potential investors and if positive can be used to lobby the three governments to hasten the process.

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APPENDICES

APPENDIX : 1

LETTER OF INTRODUCTION

Rachel Muthoni Ndegwa
University of Nairobi
Faculty of Commerce
P.O. Box 30197
Tel: 0722 635168
Nairobi.

30th September 2008,

Dear Sir/Madam,

I am a Post Graduate Student in the School of Business at the University of Nairobi. I am conducting a Management Research on "Factors limiting the integration of Capital Markets in East Africa Countries.

Your organization has been selected to form part of the study. This is therefore to request your assistance in filling the attached questionnaire. The information you give will be treated with strict confidentiality and is needed purely for academic purposes. Even when a name has been provided, it will not under any circumstances appear in the final report.

A copy of the final report will be made available to you upon request.
Your assistance and co-operation will be greatly appreciated.

Yours sincerely,

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Rachel Muthoni Ndegwa   Mr H. Ondigo
(Student)   Lecturer, University of
Nairobi

APPENDIX 2: QUESTIONNAIRE

rt A

ase fill the blank Space

Name of the firm ....

Country..

low important is it to integrate the three capital markets in East Africa

1. Not important
2. Less important
3. Important
4. Very important
5. Don't know

ted below are statements dealing with factors considered to be limiting the integration of Capital markets in East Africa. Please rate factors by ticking the appropriate box.

1. Strongly disagree	4.	Agree
2. Disagree	5.	Strongly agree
3. Neutral	6.	Don't know

1. Differential tax rate on dividends and interest income	[1]	[2]	[3]	[4]	[5]	[6]
2. Political Good will	[1]	[2]	[3]	[4]	[5]	[6]
3. Different growth rates	[1]	[2]	[3]	[4]	[5]	[6]
4. Low income levels in the region	[1]	[2]	[3]	[4]	[5]	[6]
5. Weak Banking systems	[1]	[2]	[3]	[4]	[5]	[6]
6. Existence of multiple regional blocks	[1]	[2]	[3]	[4]	[5]	[6]
7. Fluctuating Foreign Exchange rate	[1]	[2]	[3]	[4]	[5]	[6]
8. Lack of hedging instruments	[1]	[2]	[3]	[4]	[5]	[6]
9. Differential inflation rates in East Africa countries	[1]	[2]	[3]	[4]	[5]	[6]

Differential income levels in the region	[1]	[2]	[3]	[4]	[5]	[6]
Amount and content of on information disclosed by listed companies in the financial statements	[1]	[2]	[3]	[4]	[5]	[6]
Differences in trading days and hours	[1]	[2]	[3]	[4]	[5]	[6]
Absence of common rating standards .	[1]	[2]	[3]	[4]	[5]	[6]
Absence a regional rating agency	[1]	[2]	[3]	[4]	[5]	[6]
Lack of a Common currency	[1]	[2]	[3]	[4]	[5]	[6]
High transaction costs	[1]	[2]	[3]	[4]	[5]	[6]
Restrictions on foreign investments and control	[1]	[2]	[3]	[4]	[5]	[6]
Lack of depth and liquidity	[1]	[2]	[3]	[4]	[5]	[6]
Differences in accounting standards	[1]	[2]	[3]	[4]	[5]	[6]
The absence of uniform automated trading system	[1]	[2]	[3]	[4]	[5]	[6]
The absence of central clearing and depository system (CDS)	[1]	[2]	[3]	[4]	[5]	[6]
Requirements for cross border listing for companies	[1]	[2]	[3]	[4]	[5]	[6]
Common laws to protect investors interest	[1]	[2]	[3]	[4]	[5]	[6]
Restrictive rules and regulation of the various Capital Market Authority (CMAs).	[1]	[2]	[3]	[4]	[5]	[6]
The restrictions of foreigner's holdings in a quoted company.	[1]	[2]	[3]	[4]	[5]	[6]

?ase use the space below to state and rate any other factors you feel constrains the integration of East rican Capital markets. Use the key below:

Key

1.	Strongly disagree	4.	Agree
2.	Disagree	5.	Strongly agree
3.	Neutral		

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PART B

Listed below are statements dealing with possible solutions to the constraints of the integration of East African Capital Markets. Please rate by ticking the appropriate box.

1. Inclusion of the private sector in integration process   [1]   [2]   [3] ·   [4]   [5]   [6]
2. Creation of a Supra-Regional capital market institution   [1]   [2]   [3]   [4]   [5]   [6]
3. Adherence of International Standards   [1]   [2]   [3]   . [4]   [5]   [6]
4. Streamline and Simplification of prospectus requirements.   [1]   [2]   [3]   [4]   [5]   [6]
5. Joint Central Depository System   [1] ·   [2]   [3]   [4]   [5]   [6]
6. Privatisation of companies   ·   [1]   [2]   [3] ·   [4]   [5]   [6]
7. Regional rating services   [1]   [2]   [3]   [4]   [5]   [6]
8. Promotion of sound institutional investor base.   [1]   [2]   [3]   [4]   [5]   [6]
9. More investor protection mechanisms   [1]   [2]   [3]   [4]   [5]   [6]
10. More linkages with other Stock Markets   [1]   [2]   [3]   [4]   [5]   [6]

Please suggest other possible solutions to the constraints facing the Integration of East African Capital Markets.

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