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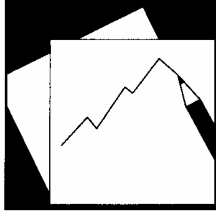

IMF Working Paper

Regional Integration of Stock Exchanges in Eastern and Southern Africa: Progress and Prospects

Jacqueline Irving

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IMF Working Paper

African and International Capital Markets Departments

Regional Integration of Stock Exchanges in Eastern and Southern Africa: Progress and Prospects

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Abstract

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This paper assesses whether regional cooperation and integration of stock exchanges in eastern and southern Africa could offer a way of overcoming impediments to the exchanges' development. The paper concludes that regional cooperation and, at a later stage, integration, if carried out at the right pace and in a pragmatic way, could improve the liquidity, efficiency, and competitiveness of these exchanges. Further progress in developing national financial markets must precede any actual moves to integrate securities markets. These exchanges could meanwhile benefit from closer cooperation, including by encouraging more crossborder listings and information/technology sharing.

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I. INTRODUCTION

Most of the national exchanges in southern and eastern Africa are relatively new, operating since the late 1980s and 1990s. This recent proliferation of stock exchanges tended to coincide with a new policy emphasis on privatization of large stakes in state-owned enterprises. To date, however, the role of most African exchanges in privatization programs has remained relatively small.

South Africa's Johannesburg Stock Exchange (JSE), founded in 1887, overshadows all other exchanges in southern and eastern Africa and, indeed, on the entire continent (see Appendix). The JSE accounts for nearly 90 percent of the total market capitalization in sub-Saharan Africa. Aside from the JSE, most African exchanges tend to share certain characteristics that have impeded their growth, development, and effectiveness in intermediating capital. A small number of listings (particularly by indigenous companies), low liquidity levels (the value of shares traded in relation to total market capitalization), and inadequate market infrastructure are among the impediments to the development of well-functioning exchanges in the region. Even the JSE has low liquidity levels by global standards (see Table 1); historically, share ownership has been dominated by a small number of large conglomerates that originated as mining concerns. Generally, trading in one or just a few stocks often dominates total trading activity. Development of the region's exchanges also has been hindered by high poverty levels, weak economic fundamentals and environment, a reluctance among local companies to become less reliant on bank finance and issue securities, and a lack of public awareness of the benefits of investing in shares among those with the financial means to do so.

Many of the exchanges are supporting further capital market development through the introduction of new financial instruments such as mutual funds and other collective investment vehicles and have been encouraging national authorities to issue government securities and make use of the exchanges as vehicles for privatization. Those exchanges that still use manual trading systems have plans to move to automated trading. The exchanges have been trying to attract more indigenous firms by setting up over-the-counter markets and/or secondary and tertiary markets with less strict listing requirements. Increasing attention has been given to public educational and promotional programs to attract more investors. Some national exchanges have proposed that these efforts also should be carried out on a regional basis. For example, the Nairobi Stock Exchange has proposed that all three East African Community (EAC) exchanges jointly conduct a regional public awareness and educational campaign. Most of the exchanges now operate websites that provide updated information on trading activities and development progress and plans.

A trend underway since the early 1990s has seen exchange controls on inward portfolio investment liberalized in several countries—a development that has spurred crossborder listings and other signs of closer regional links between capital markets. Moreover, the idea of working toward closer cooperation and even integration among the stock exchanges is part of a renewed, broader push for regional integration—to removing barriers to the free movement of people, goods, services, and capital—within the various subregions.

This paper assesses whether cooperation and/or integration of stock exchanges in southern and eastern Africa could offer a way of overcoming impediments to the exchanges' development. Based on primary and secondary sources, the paper takes stock of the proposals in this area put forward by regional organizations in southern and eastern Africa and assesses how the subregion's 12 national exchanges have progressed in terms of regional cooperation/integration and development.

Following a review of this progress, the paper concludes that regional integration, if carried out at the right pace and in a pragmatic way, could improve the liquidity, efficiency, and competitiveness of the region's exchanges. Cooperation and integration of national stock exchanges could offer them a way of overcoming some of the impediments to development that most of them now face as relatively fledgling and illiquid exchanges. Too rapid a move to a fully integrated, regional stock market could merely create a large illiquid market, however. Moreover, a plan that aims to forge an integrated network of autonomous national exchanges—as envisaged by the Southern African Development Community's Committee of SADC Stock Exchanges—is likely to garner more support from participating member countries than a plan that closes down and replaces existing national exchanges with a single regional exchange.

Looking further ahead, as regionalization and capital market development advances, establishing stock market segments across a region, specializing in different industry sectors or types of share issues, might foster further capital market development by improving efficiency. In the meantime, agreements and alliances—with exchanges both within and outside the region, including in developed countries—that promote crossborder listings, technology and information sharing, and training would help develop national capital markets, as well as foster further regional integration.

Following a review of the existing literature in the next section, Section III then looks at the possible benefits and obstacles associated with regional integration of stock exchanges. Section IV surveys progress so far toward regional integration and cooperation among exchanges in southern and eastern Africa. Section V discusses requirements for a well-functioning, regionally integrated exchange, while Section VI provides concluding remarks.

II. LITERATURE REVIEW

Since the 1980s, there has been growing recognition of linkages between financial markets and economic growth. The literature has for some time explored links between financial development and economic growth, 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. Among the studies published over the last five decades, Gurley and Shaw (1955), Patrick (1966), Goldsmith (1969), McKinnon (1973), Shaw (1973), and Cameron (1975) used varying approaches to conclude that an efficient financial system may increase investment and improve its allocation, thereby having positive effects on growth. Patrick's research (1966) is noted for first

identifying a two-way causality relationship between financial market development and economic growth.

It is only relatively recently, however, that the relationship between stock market development and economic growth has been specifically examined in the literature. Levine and Zervos (1995, 1996) conducted empirical cross-country studies that found a positive and robust relationship between stock market development and long-run economic growth. Atje and Jovanovic (1993) found that stock market development could have a substantial effect on economic growth, while they failed to find a similar effect of bank lending on economic growth—a conclusion that they describe as surprising. In contrast, Calamanti (1983) concluded from her analysis of securities markets in francophone African developing economies that securities markets cannot significantly contribute to economic growth in these economies because, even in the few country cases where securities markets were linked with economic growth, the markets seemed to be the result, rather than any cause of, such growth.

Many proponents of stock market development have argued that it can contribute positively to economic growth by increasing and improving the allocation of savings and investment. Engberg (1975) saw a role for capital markets in raising domestic savings levels and contributing to a more efficient allocation of those savings, even in less developed economies. Engberg also argued that the broader range of financial assets associated with capital market development could raise personal savings rates. Levine (1990) showed that a stock market can positively impact growth by providing a means of trading the ownership of firms (shares) without disrupting the operating and productive processes within those firms and by providing a way for investors to diversify their portfolios.

Because of the risks associated with securities markets, Calamanti (1983), in contrast, argued they may actually jeopardize growth in least developed countries by producing economic instability and adversely affecting savings allocation and the reallocation of existing real wealth. Fry (1998) found insignificant empirical evidence supporting any positive relationship between stock market development and higher savings levels, arguing that any resulting increase in savings would likely be the result of savers shifting from holding nonfinancial to financial assets. Hamid and Singh (1992) found in their empirical studies of developing economies that, while large corporations "clearly" benefited from stock market activity, the host economy as a whole "gained little" because, in many cases, investment in portfolio shares replaced bank savings, with no increase in the economy's aggregate savings or investment.

There also has been considerable lack of consensus within the literature on the appropriate priority that should be given to stock market development within overall financial and economic development. Levine and Zervos (1995, 1996) suggested that banks and stock markets have a complementary relationship in contributing positively to economic growth. Using time series methods and data from five developed economies while controlling for the effects of the banking system and stock market volatility, Arestis, Demetriades, and Luintel (2001) conclude that both banks and stock markets could potentially promote economic growth, albeit with banks having stronger effects.

Based on her analysis of securities markets in francophone African economies, Calamanti (1983) supports a “gradual approach” to financial development, which focuses on developing commercial banks and medium- and long-term credit institutions, with consideration given to setting up a securities market only when a country is at an “advanced stage of industrialization” and following a careful assessment of the associated costs and risks. Similarly, in his study examining the merits and disadvantages of establishing stock markets in sub-Saharan African countries, Singh (1999) argued that the scarce resources available for financial sector development would be put to better use in improving the functioning and prudential regulation of banking systems in these underdeveloped economies. Drawing on empirical and theoretical evidence from both developed and developing countries, Singh concluded that a stock market would be a “costly irrelevance” for many African economies and could harm rather than benefit a number of the region’s economies, particularly those with weak banking systems, by simply adding to the financial system’s fragility.

Comparatively few studies have examined the factors that impede and facilitate the development and/or integration of less developed economies’ stock markets. There is a dearth of literature, in particular, on impediments and facilitators to regional integration of developing countries’ stock exchanges.

A survey of the existing literature shows that various factors affect the development of stock markets in developing countries. Demirgüç-Kunt and Levine (1993) categorized many of the key factors as institutional (regulations, information disclosure, transparency rules, and trading costs), traditional (market capitalization, amount of new capital raised through stock offerings, number of listed companies, and turnover), and asset pricing (efficiency with which a market prices risk and the degree of integration into world markets).

Many analysts have underscored that building institutional capacity is a key element in successful securities market development (Calamanti, 1983; Chuppe and Atkin, 1992; Pardy, 1992; Bekaert, 1993). Pardy emphasizes the central role played by governments, first, in facilitating the development of stock markets in developing countries, beginning with laying solid legal and institutional foundations, followed by supervising the market to ensure its efficient, fair, and stable operation. To address the informational asymmetries that occur naturally, yet impede, the development of well functioning securities markets, Chuppe and Atkin underscore the importance of regulations such as disclosure requirements for public companies, complemented by good accounting standards, along with credible contract enforcement and restrictions on the intermediaries licensed to participate in trading. At the same time, Chuppe and Atkin conclude that, to ensure that securities markets allocate resources to their most productive uses, regulation should be limited to that which is needed to correct the market failures that arise in unregulated markets. They also see a role for foreign institutional investors in facilitating securities market development since the activities of these investors—which tend to be less affected by informational asymmetry than individual investors—can improve information flows about company prospects.

So-called traditional factors such as low stock exchange turnover rates, the small number of local investors, the small number of listed securities, and a limited number of potential issuers can also pose significant impediments to the development of securities markets in less

developed economies. Calamanti (1983) found that the larger companies that could qualify for a listing tended to be mostly financed by foreign capital, further impeding activity on the exchange. Even those local companies that would qualify for a listing were reluctant to do so for fear of losing control of ownership/management. Among the measures she recommended to address these traditional impediments was the promotion of institutional investors, along with improved regulatory, disclosure, and institutional arrangements.

A sound and stable macroeconomic environment is a critical prerequisite to the proper functioning of a stock market (Pardy, 1992). Bekaert (1993) included high and variable inflation rates and exchange controls among the major economic impediments to equity market development and integration globally. According to Calamanti's studies of francophone African securities markets (1983), development of these markets in Côte d'Ivoire, Morocco, and Tunisia during the research period (mainly the 1970s) required higher levels of domestic savings (particularly private savings) combined with more even distribution of wealth and more industrialized and diversified economies. She further noted that meeting these conditions, in turn, required more balanced economic development.

In a more recent country case analysis, evaluating the role of the Botswana Stock Exchange (BSE) in financial and economic development over the 1989–1993 period, Jefferis (1995) concluded that there were significant limits to the BSE's potential for financing the manufacturing sector and, consequently, significant limits to its ability to have a positive impact on diversifying the economy—a main development goal for Botswana, which continues to rely heavily on minerals exports. Following his review of the BSE, Jefferis also recommended addressing the impediments of the market's narrowness and inadequate supply of equity securities available to local investors by making greater use of the BSE in carrying out privatizations. It is worth noting, however, that, in the decade following Jefferis's evaluation of the BSE, the number of listed companies increased from 10 to 18, with an increasing number of small- to medium-sized company listings.

Among the recent surveys of the impediments to regional integration and/or cooperation of less developed economies' exchanges, Okeahalam (2001) highlights nationalist politics—in this case, particularly the smaller economies' perception of South Africa's regional dominance—as the largest obstacle to a merged regional SADC exchange. A 2002 World Bank assessment of prospects for capital markets integration in the East African Community similarly notes the presence of "geopolitical difficulties" in the form of "an undercurrent of resistance" on the part of Kenya, and, less so, Tanzania and Uganda, to closer links with South Africa. The study observes, however, that forging such links may prove increasingly attractive to the EAC members, given the JSE's technology and other links with the London Stock Exchange, as well as increased South African direct investment flows to the EAC.

Recent studies have identified improving and harmonizing economic policies and regulatory frameworks and practices, while modernizing information technologies, as important facilitators to regional cooperation and integration. Okeahalam (2001) describes a single consolidated electronic platform, a single set of rules governing trading and settlement, and a SADC-wide integrated clearing and settlement process as important facilitators to a regionally integrated SADC exchange. In proposing a regional exchange for COMESA countries,

Mwenda (1999) also recommends that the countries involved work toward 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."[2]

III. REGIONAL INTEGRATION: POSSIBLE BENEFITS AND OBSTACLES

Cooperation and integration of stock markets in southern and 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.[3]

Regionalization could open a platform for privatizing large corporations in Africa by providing a market for large share issues that could not be absorbed on a national basis. Large transactions

[2] See also Section IV of this paper, which discusses COMESA's proposal for a country fund, which, as envisaged, would be crosslisted on several exchanges in COMESA.

[3] Many of the subregion's national exchanges currently maintain some restrictions on inbound foreign portfolio investment, in terms of both composition and size. Regular monitoring of foreign portfolio inflows, combined with more stringent restrictions on foreign portfolio investment from any one investor source and in certain securities, seems prudent as a means of preventing the potentially destabilizing effects on the macroeconomy of sudden surges of short-term speculative capital inflows and outflows. This should also help foster development of the capital markets. While it is unlikely that these capital markets would become vulnerable to such speculative flows in the near term, with increasing globalization, this could become a concern in the medium term. See also Mwenda (2000).

such as these have 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.

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 (See, e.g., Okeahalam, 2001).

However, a key point is that regional integration, if carried out at the right pace and in a pragmatic way could improve the liquidity, efficiency, and competitiveness of the 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. Liquidity is one of the most essential elements for a strong link between stock market development and long-term economic growth.[4]

Progress in developing capital markets at the national level is needed first—in promoting collective investment vehicles, generating public awareness of the benefits of investment through educational and publicity campaigns, and encouraging investment by pension funds and other institutional investors in securities traded on the exchange. More needs to be done to address illiquidity constraints than just taking steps to increase the numbers of issuers and investors, however (see also Section V). To varying degrees, many national exchanges are constrained by a lack of appropriate institutional capacity for enforcing stock market regulations, rudimentary stock market infrastructure and poor and unreliable access to information and communications technology, and stock market regulations modeled on those of more developed financial markets and hastily adopted without adequate regard for local market conditions. Efforts to harmonize regulatory and policy frameworks, as well as develop common infrastructure and systems, on a regional basis may have to take into account some or all of these limitations where they exist at the national level and ensure that, where necessary, frameworks, institutions, and infrastructure are scaled up yet remain appropriate for the functioning of these markets. The task would be complicated where national exchanges are at significantly different stages of development.

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[4] Levine (1991) argues that liquid stock markets can encourage more investment in high-return projects that require long-term capital commitments. Liquid equity markets give a project's initial investors some assurance that they would not necessarily have to tie up their savings for the duration of a long-running investment but could sell off their stakes quickly and cheaply. Levine and Zervos (1996) looked at cross-country growth regressions to further evaluate the relationship between stock market development and long-run economic growth, finding a strong correlation.

Instead of having one strong regional integration body in southern and eastern Africa, there are overlapping memberships in the different regional groupings—including COMESA, SACU, SADC, and EAC. This has resulted in duplication of effort and, occasionally, inconsistent aims in regional integration initiatives—by SADC and COMESA, in particular. Notably, however, in recent years, COMESA has defined its role in promoting regional integration of stock exchanges as one of building on the prior achievements of SADC and EAC (see Section IV).

The inherent nature of nation states implies that it is not uncommon for all regional integration plans to encounter some resistance at the national government level. Governments may oppose the idea of relinquishing the symbol of national sovereignty that a national exchange represents. Of course, resistance is likely to vary according to the degree to which sovereignty is relinquished.

Insufficient interest and motivation from within the region itself impedes further stock market development and regionalization. The African Stock Exchanges Association (ASEA), formed in 1993 to promote development of and cooperation among African exchanges, actually had to cancel its annual conference scheduled for 2001 in Johannesburg because of lack of sufficient confirmation of attendance from delegates from exchanges and governments in Africa. Shortly after ASEA cancelled the conference, some commentators suggested moving future conference events to sites in Europe as a better means of "showcasing" Africa's capital markets to the West. In 2003, ASEA joined with the UN Development Programme and the New York Stock Exchange to hold an African Capital Markets Development Forum in New York, a main aim of which was to inform U.S.-based institutional investors of the investment opportunities offered by African stock exchanges. Forums such as this one could help African participants to showcase some of the high-performing companies listed on their countries' exchanges, while also drawing attention to the need for more public-private partnerships between large international companies, African SMEs, and international donors, to nurture nascent African private sectors to grow, create jobs, and contribute to economic growth.

Deep and pervasive poverty coupled with the large role of the agricultural and informal sectors in many African economies may make stock exchanges seem a "costly irrelevance:" the number of local companies that currently use them tend to be small and the number of potential local investors much smaller.[5] Start-up costs for most of the African exchanges that have emerged since the late 1980s have been partly funded by the International Finance Corporation and other donors.[6] However, the low trading levels that characterize most national exchanges in southern and eastern Africa mean that they cannot cover their own operating costs and tend to have to continue to rely on some form of subsidy and/or high taxes imposed on members

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[5] Singh (1999) argues this point, calling for African economies to improve their banking systems ahead of developing stock exchanges.

[6] See Okeahalam (2001) for an analysis of the operational costs of the SADC exchanges, which concluded that the cost of trading on the smaller SADC exchanges is too high.

and investors. Even abstracting from the narrow cost argument, efficiency questions remain, given that smaller stock exchanges in developed countries also are struggling.[7]

Thus, variance among member states in their commitments to further capital market development as well as regional cooperation and integration—due to a combination of sovereignty concerns and limited available resources for such initiatives—can threaten to derail or delay progress. As one concrete example, the technology that would be required to link the Johannesburg Stock Exchange with the other exchanges in the region may be beyond the current financial means of many of the smaller exchanges—particularly since the JSE has forged technology links with the London Stock Exchange (see Sections IV and Appendix).

IV. PROGRESS TOWARD REGIONAL INTEGRATION AND COOPERATION

A. Southern African Development Community

Southern African Development Community (SADC) members with established national exchanges are Botswana, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. (See Table 2 for market statistics of SADC exchanges.)

The Committee of SADC Stock Exchanges (COSSE), formed in 1997 as a private sector initiative within the subregional grouping, aims to contribute to economic development in the 14 SADC member states by "facilitating the raising of capital in compliance with acceptable listing requirements." COSSE has set a target date of 2006 for forging an integrated, real-time network of national securities markets in the SADC region. According to this regional strategy, each national exchange will offer automated trading in a range of financial instruments via a regionalized trading system that would be accessible "from a single desktop workstation."

The Committee aims to achieve this vision of regionalization of autonomous national stock markets by promoting a transparent regulatory environment that protects market participants and attracts investors; improving the exchanges' operational capacity and technical underpinnings; promoting cooperation among the exchanges; promoting harmonization of trading, clearance, and settlement procedures; and providing a forum for information exchange and discussion on development of the subregion's stock markets.

By 2000, all SADC exchanges had harmonized their listing requirements based on the 13 principles of the JSE's listing requirements. At the same time, the national listing rules are not

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[7] Some African exchanges may wish to consider demutualization, which has increased in popularity in other regions over the last decade (Okeahalam, 2001). For-profit ownership may produce potential advantages in increasing an exchange's incentives to reduce costs, operate more efficiently/competitively, and may provide greater flexibility, in terms of providing exchanges with enhanced opportunities to merge and/or form partnerships.

identical across the board, maintaining some slight differences to take into account varying national constraints and levels of technical development.

The installation of the JSE's electronic trading system, the Johannesburg Equities Trading (JET) system, at the Namibia exchange in November 1998 via a telecommunications link to the JSE, marked a major step toward harmonized trading in the subregion. The Namibia Stock Exchange also joined the JSE in adopting the London Stock Exchange's trading system technology, SETS (Stock Exchange Electronic Trading System), in May 2002.

Under a five-year agreement, the London Stock Exchange (LSE), in addition to providing its trading system technology to the JSE, provides technical support and trading system upgrades and enhancements; moreover, brokers in both South Africa and the United Kingdom are able to access one another's stock markets (see JSE entry in the Appendix). Other related developments that are intended to encourage increased trading and investment on the JSE by foreigners include the exchange's extension of its operating hours so that early-day trading is more aligned with trading hours in Europe and the joint launch with the LSE of a new series of indexes, known as the JSE/FTSE Africa indexes, which facilitate foreign investor comparison of shares.

Because of the existing ties between the NSX and the JSE, the FTSE also calculates and distributes the NSX's indexes as part of the JSE/FTSE Africa index series. NSX officials look to the link to the LSE as a means of attracting more international investors to the NSX. Beyond technology sharing and harmonized listing rules, the JSE and the NSX have tight links on the regulatory side: the NSX has based its trading rules and entry criteria for stockbrokers on the JSE requirements.

Since 1998, the JSE has also offered use of its trading system, along with technical assistance, to the other SADC exchanges. The exchanges have been looking at how the JSE's trading system might be adopted as the subregion's trading platform, as well as considering other technology options for an integrated network of exchanges.

In August 2003, the JSE announced that it had begun serious discussions with other African exchanges—including one outside the SADC subregion (Ghana's exchange), as well as exchanges in Namibia, Zambia, and Zimbabwe—on a proposal to set up a so-called pan-African board whereby large companies could be traded on a virtual African exchange. This would enable a qualifying company to effectively list simultaneously on all participating exchanges. As envisaged by the proposal, participating national exchanges would maintain their autonomy as they would still be responsible for regulation and sanction of their members and issuers. At the same time, the JSE would be the overseer of the new board, and would alert country exchanges of irregular activity. Before implementation, non-SADC participating exchanges would have to harmonize listing requirements with the SADC participants. According to JSE officials, the proposal was prompted by South Africa's commitment to NEPAD, to help attract more foreign investment to Africa and slow capital flight, and the JSE would provide access to the board at cost. Critics of the proposal, including officials at the Botswana Stock Exchange, insist that it would instead lead to capital flight toward the JSE,

reducing the number of investors and issuers on the other SADC exchanges and resulting in still lower trading volumes.

The SADC exchanges have been working toward adopting a common framework for clearing and settlement. Among other options under consideration are establishment of a linked network of individual CDSs tailored to the specific needs of member exchanges.

COSSE is also trying to draw up common standards for all stockbrokers operating in the SADC region. This would enable brokers based in one SADC member state to establish a presence in any other member state.

As envisaged by COSSE's regional integration plans, regulation and surveillance of national exchanges ultimately will be carried out by a regional body. At a series of SADC Committee meetings, officials from the national exchanges, commencing with Johannesburg Stock Exchange officials at a meeting in Windhoek, Namibia in 2001, have been reporting on their national surveillance and regulations. This exchange of information on national surveillance policies and practices will be used to devise a system of surveillance and regulation for the SADC region.

COSSE also aims to develop the subregion's bond markets and has been encouraging national authorities to consider issuing government securities on the subregion's exchanges. Discussions have also stressed the importance of national regulatory environments and infrastructure that promote active bond markets.

B. Common Market for Eastern and Southern Africa

Common Market for Eastern and Southern Africa (COMESA) members with established national exchanges are Egypt, Kenya, Malawi, Mauritius, Swaziland, Uganda, Zambia, and Zimbabwe.

Given the overlapping memberships of southern and eastern Africa's regional organizations, COMESA sees its role in promoting regional integration of stock exchanges as one of building on the work already done by SADC and the EAC. To this end, COMESA encourages cooperation among member states (e.g., harmonization of listing requirements) to work toward eventual full integration of COMESA capital markets.

In 2000, COMESA commissioned a study on "International Portfolio Investment Funds in Nascent Markets: The Case for Closed-end Country Funds in Africa," undertaken by the Lusaka Stock Exchange. The LuSE published the study results in December 2000. With the aim of promoting regional integration of capital markets and integration of Africa in global investment markets, this study explored the possibility of setting up a closed-end fund that would be crosslisted on several exchanges in COMESA.

As envisaged, the fund would buy shares on COMESA national exchanges, package the shares into "regional share units," and sell the combined regional shares to regional and overseas investors. By investing in this fund, investors would acquire cross-shareholdings on the individual exchanges and the combined shares could then be traded individually or as

blocks of regional shares. COMESA hopes that such a fund would generate regulatory and economic reforms in COMESA members and induce a virtuous circle that would broaden and deepen financial markets in the region.

The study also proposed recommendations for taking work in this area forward, noting that the appointment of a reputable investment bank to coordinate and manage the fund would be critical to the success of the project. COMESA is preparing terms of reference for a follow-up study that would build on the LuSE study by identifying constraints on portfolio investment, assessing the reaction of the COMESA members and financial community to the proposed fund, reviewing tax and securities markets policies in the region, and determining the size and type of fund that would be most appropriate.

C. East African 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.

As part of measures to develop a common capital market strategy for the subregion, 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 subregion. 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.

The Nairobi Stock Exchange and Kenya's Capital Markets Authority (CMA) are taking a number of actions to promote regional integration of EAC capital markets, including the following: coordinating the drafting of harmonized foreign investor rules for EAC members; presenting the Kenya CMA's upgraded trading rules to other EASRA members for EAC-wide harmonization; and taking the lead in developing common market infrastructure and regulations (see the Nairobi Stock Exchange entry in the Appendix). The Kenya CMA plans to circulate draft rules and regulations on a Central Depository System and is developing minimum eligibility criteria for crossborder brokers. The Nairobi exchange has proposed that all three EAC exchanges jointly conduct a regional public awareness and educational

campaign, whereby contact is made with a list of potential issuers of both equity and debt compiled periodically on a regional basis.

The Uganda Securities Exchange has harmonized its listing rules with those of the Nairobi Stock Exchange. The exchanges also have progressed toward common trading and settlement rules and procedures. The East African exchanges are examining different technology systems that would foster cooperation and integration by setting up an East African Central Depository System and an electronic trading platform for the subregion. This synchronization of rules, technology, and systems is expected to pave the way for more crossborder listings (see section on crossborder listings below). NSE officials recently indicated that the automated regional infrastructure could form the basis for additional linkages in future with other African exchanges.

The EAC Capital Markets Development Committee also aims to promote the use of capital markets for carrying out privatizations and to encourage the development of financial instruments and institutions, particularly collective investment vehicles.

In an effort to develop the subregion's bond markets, EASRA is compiling debt ratio criteria for banks and insurance companies in the EAC that wish to issue debt securities. EASRA recently proposed harmonizing fiscal treatment of income from debt securities in the three East African markets.

D. Regional Cooperation: Crossborder Listings and MoUs

Since the liberalization of exchange controls in many SADC countries in the 1990s, several companies have sought dual listings. More than 70 percent of the equities listed on the Namibia Stock Exchange are dual listed on the JSE and the vast majority of NSX trading takes place in these dual listed stocks. The various efforts within the subregion to harmonize rules, technology, and systems are expected to pave the way for more crossborder listings from companies based in partner countries, thereby potentially boosting the supply of listed securities and market capitalization and liquidity. Motivations for seeking crossborder listings can include a desire to raise brand awareness and corporate image in overseas markets, a desire to further consolidate a company's position within a region, and improved ability to mobilize funds for expansion and provide for diversification of sources of capital.

Anglo American PLC, a leading mining concern, listed on both the Namibia and Botswana stock exchanges in 2001, partly to appeal to a broader pool of investors. The company's primary listing is currently on the London Stock Exchange, with secondary listings on the JSE and Swiss exchanges. Other companies dual listed on the JSE and the Botswana exchange are Alexander Forbes Ltd. and Ellerine; a number of companies are dual listed on the Zimbabwe exchange and the JSE: Bicc Cafca, Ltd., Falcon Investment Holdings, Old Mutual, Pretoria Portland, and Wankie Colliery. Old Mutual, which has its primary listing on the LSE, had secondary listings on four SADC exchanges as of end 2004: the Malawi, Namibia, Johannesburg, and Zimbabwe exchanges.

Recognizing the potential boost from crossborder listings to market capitalization and liquidity on national exchanges in the subregion, EASRA agreed an approval procedure in 2000 for crossborder listings in the EAC.[8] A few such listings have followed. In the last few years, two companies with primary listings on the Nairobi Stock Exchange have carried out secondary listings on the Uganda Securities Exchange: East African Breweries in March 2001 and Kenya Airways in March 2002. Kenya Airways also crosslisted on the Dar es Salaam Stock Exchange in December 2004, now that crosslistings on the DSE are permitted by companies based in Kenya or Uganda. East African Breweries reportedly also has been planning a crosslisting on the DSE.

Stock exchanges in eastern and southern Africa have been signing memoranda of understanding in recent years, largely as a means of encouraging information exchange and, in some cases, technology sharing and crossborder listings. Some of these MoUs also promote joint efforts to develop new financial products and develop the stockbroking profession, including through training assistance.

The Johannesburg Stock Exchange, in particular, has signed many MoUs, including with African exchanges outside the SADC region (for example, in Egypt, Ghana, Kenya, Nigeria, and Uganda). According to the Uganda exchange's website, the signature of an MOU with the JSE in 2001 paved the way for possible cooperation and integration with southern African exchanges in future. The Nairobi Stock Exchange has signed a number of memoranda of understanding with exchanges outside the east and southern African region (e.g., with the Nigeria Stock Exchange and the Ghana Stock Exchange).

V. REQUIREMENTS OF A WELL-FUNCTIONING REGIONAL EXCHANGE

Further progress in developing the subregion's capital markets—and financial markets, more generally—at the national level must precede any actual moves to integrate these markets regionally. Sound and stable macroeconomic policies—including disciplined fiscal policies to avoid "crowding out" of private investment and private-sector lending—are essential to the proper functioning of private financial markets. There is a need for more competitive national financial sectors overall across the region—with more advanced technologies (including telecommunications and information systems services) and skill levels, and transparent and freer flow of financial information. States must put in place policies that enable the creation of appropriate financial institutions, instruments, and services. A healthy banking sector is crucial to the development of stock exchanges since banks can be a good source of capital for equity investments.

Along with strengthening the economic and financial infrastructure, countries need to build institutions and pursue policies that will promote good governance. This will help countries

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[8] The crosslisting of Kenya Airways on the USE reportedly boosted market capitalization of that exchange by more than 25 percent. Kenya Airways shares accounted for some 20 percent of turnover in late 2002.

create conditions that attract the capital to broaden and deepen financial markets and enable resources to serve development in the long term. Improvements to governance and the quality of domestic institutions would help make countries less susceptible to financial market crises. All of the national systems of prudent regulation and supervision across the subregion must improve to conform to international standards. 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.

Encouraging the establishment of collective investment vehicles and institutional investors—pension funds in particular—is an important step toward improving financial intermediation in these markets. More participation by small, local investors through collective investment vehicles could help address the illiquidity that characterizes so many African stock exchanges while guarding against the potentially destabilizing effects of speculative flows. In some countries, development of private pension funds is prevented by the existence of a single state-owned pension fund with a monopoly position in the subsector. In these countries, the competition that would arise in a well-regulated national system that allows private pension funds to operate alongside the state pension fund, could not only help develop capital markets but it would reward good investment management, and would constitute a key step toward enhancing efficiency and competition in the financial sector in general..

Extremely low income levels continue to keep share ownership and even access to basic savings instruments beyond the reach of most people in this region, however. More than 40 per cent of Africa's inhabitants live on less than $1 a day. Africa is the only world region in which both per capita savings and investment rates have fallen over the last 30 years. Savings rates in the region are by far the lowest worldwide—as low as 5 percent in many countries. According to the recent UN Millennium Project report (Sachs, 2005), sub-Saharan Africa has an average savings rate of about 11 percent, versus 34 percent in East Asia and the Pacific, 20 percent in Latin America, 19 percent in the Middle East and North Africa, and 18 percent in South Asia. The actual situation is still bleaker, given that national income accounts data are likely overestimating the region's savings rate. High poverty rates and low income levels are undoubtedly major causes of low savings rates but other contributing factors over the last three decades have included poor macroeconomic policies, large fiscal deficits, and underdeveloped financial institutions (Popiel, 1990). The portion of the total population having access to conventional financial institutions remains small, particularly relative to other regions, and the number of people within that group who have access to shares traded on exchanges remains extremely limited.

Notably, in recent years, many countries have nevertheless been making some progress in introducing instruments to attract more small investors with very limited means to pool their funds and lower the risk generally associated with investments in shares traded on exchanges. According to some economic theorists, stock markets themselves can potentially raise savings and investment rates by introducing new instruments that might better meet savers' needs and by pooling the small savings of many individuals to fund investment in large-scale projects that otherwise might not be undertaken (see Section II). In Africa, there is little sign of this happening so far, however. This highlights the importance of furthering macroeconomic and

structural reforms to accelerate economic growth, reduce poverty and raise living standards, and provide an enabling environment for private sector activity and financing.

In further developing these national capital markets, there is a need to enhance liquidity by boosting the supply—the number of issuers—as well as the demand for securities issues. Indigenous companies, which tend to be small and medium-sized, so far have made relatively little use of African stock exchanges. This is partly because they lack the experience and resources for issuing shares, but also because their owners fear losing control after going public. In response, many of the region's exchanges have been devoting increasing attention to efforts to actively attract both issuers and investors.[9]

For the subregion's exchanges that maintain restrictions on foreign investment, further liberalizing the ceilings, perhaps in a two-tiered, phased manner—for residents within the subregion in the short-term and for all foreign investors in the medium- longer-term—could facilitate access to development-enhancing investment. In the case of opening up more broadly to more foreign investment in the medium term, it will be important to guard against the potentially destabilizing effects of speculative capital flows by making sufficient progress in improving macroeconomic policies and fundamentals, further developing local capital markets (including market infrastructure), and putting in place policies and a regulatory framework promoting a strong and efficient financial sector, more generally.

As these capital markets develop and increase their potential to attract a greater share of more liquid foreign investment, it will be important to have in place improved data collection and upgraded systems and procedures for monitoring these inflows. Quality and timely information on the size and composition of all forms of foreign private capital flows are key to the ability of policymakers to develop appropriate and timely policy responses, particularly in the areas of macroeconomic policy and investment promotion.

As securities exchanges in southern and eastern Africa move towards increased cooperation and—with further development of national capital markets—the forging of tighter links, they should simultaneously harmonize their macroeconomic policies, pursuing sound policies that stimulate economic growth.[10] This type of policy environment lays the groundwork for a more stable operating environment in which businesses can plan ahead and invest.

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[9] Some southern African exchanges have been moving to expand high-growth potential SMEs' access to financing by indicating intentions to set up a specialized tier for listings by professionally managed, solid companies with high growth potential and good track records in strategic sectors—modeled on London's alternative investment market. Part of a recently emerging trend in African financial markets since 2003, this listing tier could help fill the upper end of the SME credit gap—at least for some medium-sized companies deemed to have good future prospects—and would also prepare firms for a later listing on the main list and therefore could help develop local capital markets. The JSE, which launched AltX in December 2003, is among the African stock exchanges that have already moved to set up such specialized tiers for high-growth potential SMEs.

[10] Mwenda (2000), among others, considers regional integration of securities markets as an "integral part of the political and economic integration of eastern and southern African states."

A common investment code would facilitate crossborder investments as well as the eventual establishment of a formal regional exchange. Such a code is fundamental to the efficient operation of securities trading and investment across borders within a region. In order to be effective, a common investment code would have to be adopted in member states' national legislation, making it binding on all member states. A regional securities regulatory body would be essential if integration proceeds to a point where a regional exchange is created.

In the meantime, for the foreseeable future, national exchanges can continue to pursue closer cooperation within the region—through information and technology sharing, harmonization of regulations, and the encouragement of crosslistings and cross-border investment, with an eye to possible regional integration at some future time. These key steps, which fall short of regionally integrating the national exchanges, could help overcome impediments of small size, illiquidity, and inadequate market infrastructure.

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 (see Section III). In southern and eastern Africa, in particular, any future integration of the national exchanges would accord a major role to the JSE, as the region's most developed exchange with the most advanced financial markets, technologies, and institutional and regulatory framework.

Of course, resistance at the national level to any regional integration plan is likely to vary according to the degree to which sovereignty is relinquished. In this context, a plan that envisages an integrated network of autonomous national exchanges is likely to encounter less opposition than a plan that closes down and replaces existing national exchanges with a single regional exchange.

In the case of a single regional exchange as the ultimate objective, some observers argue that regional institutions must already be in place ahead of a regional exchange, pointing out that West Africa's Bourse Régionale de Valeurs Mobilières was set up 50 years after its eight member countries had unified their economies and introduced a single currency. These eight countries had several regional institutions already in place at the BRVM's launch, including a central bank, financial market supervisory body, supreme court, as well as a regional legislative framework. The BRVM also has been hindered by illiquidity since its inception, however.[11]

[11] Note, however, that even the case of the BRVM is not truly comparable since the Abidjan Stock Exchange (Bourse des Valeurs d'Abidjan) in Côte d'Ivoire was the only stock exchange in the francophone West African countries until the formation of the BRVM in 1998. At the BRVM's establishment, trading floors were newly set up in the seven other WAEMU member countries: Benin, Burkina Faso, Mali, Niger, Senegal, Togo, and Guinea-Bissau.

Some analysts and officials believe that, without a common currency, efforts to regionalize stock markets would be impeded.[12] 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.

There is broad agreement that regulatory and tax frameworks must also be harmonized before stock markets can actually link up. More specifically, this would involve harmonizing not only stock market regulations, listing requirements, and trading, clearing, and settlement procedures, but also transaction fees, accounting standards, corporate governance standards, disclosure requirements, common standards for stockbrokers, and national rules for capital gains and withholding taxes. In southern Africa, the SADC Committee of Stock Exchanges specifically advocates a regulatory framework for the region's financial markets that conforms to international best practices.

In order to carry out and clear crossborder securities trades 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.

VI. CONCLUSIONS

A. Main Findings

Cooperation and integration of the national stock exchanges in southern and eastern Africa could offer a way of overcoming some of the impediments to development that most of them now face as relatively fledgling and illiquid exchanges. Regional integration, if carried out at the right pace and via the right approach, could improve the liquidity, efficiency, and competitiveness of the region's exchanges, thereby enhancing their ability to mobilize local and international capital for private-sector and infrastructural development. On the other hand, too rapid a move to a fully integrated, regional stock exchange could merely create a large, illiquid market.

Of the two main regional organizations in the eastern and southern African region, SADC has advanced farther than COMESA toward regionalization of members' exchanges. Indeed, taking into account overlapping memberships of regional organizations in eastern and

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[12] The World Bank report *Can Africa Claim the 21st Century*? (2000) notes that the lack of a common currency limits regionalization of capital markets.

southern Africa, COMESA's most recently stated aims in this area focus on building on the progress of SADC and EAC initiatives.

As discussed in Section IV, the Committee of SADC Stock Exchanges (COSSE) aims to put in place an integrated, real-time network of national securities markets in the SADC region by 2006. As envisaged, all of the national exchanges would remain in place and would be crosslinked to form a network offering automated trading in a range of financial instruments via a regionalized trading system that would be accessible "from a single desktop workstation." By maintaining the existing national exchanges, sovereignty concerns could be minimized and national officials would likely give their support more readily than they would in the case of a regionalization strategy that closed down and replaced national exchanges with a single, regional exchange. The deadline of 2006 does seem overly ambitious, however, particularly since the required technology may be beyond the financial means of many of the smaller exchanges.

Setting up the JSE as a single stock market hub for the region may seem to have certain economies of scale, cost, and efficiency benefits—at least in the short- to medium-term—because the JSE is by far the region's largest and most liquid exchange. However, this approach to regionalization may initially create uncertainties regarding possible shifts in capital flows within the SADC subregion, toward Johannesburg. At the same time, as the JSE is undergoing a period of change, it is unclear as to how regional integration would affect both the JSE's liquidity and the perceived value of any such regional alliance.[13] Most notably, over the last several years, a number of primary listings have departed the JSE for the LSE and other exchanges. The total number of listed companies has fallen significantly, from 620 in 1999 to just 403 five years later (by end 2004).

While listing rules have now been harmonized in line with international standards across all SADC exchanges, some slight differences between exchanges' listing rules have remained. This element of flexibility is necessary in order to take into account national variances in technical development levels and constraints. Similarly, COSSE intends to prioritize the adoption of automated and interlinked trading, clearing, and settlement systems rather than (necessarily) the implementation of a completely uniform, single system throughout all SADC exchanges. This approach to harmonizing regulations, procedures, and systems helps avoid unnecessary stalling of progress toward regionalization.

As regionalization advances, the establishment of stock market segments across the region, specializing in different industry sectors or types of share issue, could foster further capital market development by improving efficiency. For example, segments might be set up to specialize in trading issues of high-growth stocks or to specifically attract listings of small- to medium-sized companies in the region. Indeed, in the past two years, some national exchanges have begun setting up their own specialized tiers for well-managed, high-growth potential SMEs (see Appendix); these specialized tiers could perhaps, in future, be linked at the subregional level, improving liquidity and efficiency and cutting costs.

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[13] Okeahalam (2001).

In the meantime, national exchanges can pursue closer cooperation by encouraging more crossborder listings—a key step short of creating actual regional exchanges. Crosslistings can give issuers access to much wider markets, increase investor choices, and may also encourage domestic companies to list on their local exchange. Memoranda of understanding and other arrangements that promote technology and information sharing and training assistance can also go some way toward fostering regional cooperation and developing capital markets. The largest exchanges in eastern and southern Africa also have signed agreements with some exchanges in other parts of Africa.

By forming strategic alliances with exchanges outside the subregion—including with exchanges in developed countries—exchanges in eastern and southern Africa may be able to gain better access to new technologies and innovative financial instruments needed to attract more investors and deepen financial markets.[14] The JSE has forged such an alliance with the London Stock Exchange (LSE), which includes access by the JSE since May 2002 to the LSE's trading system technology (Stock Exchange Electronic Trading System, or SETS) and other core technology services, as well as extension of JSE trading hours and introduction of indexes to encourage increased foreign investment and trading.

Because of its preexisting technology links and ties with the JSE, the Namibian Stock Exchange (NSX) has been most immediately and directly affected by the JSE-LSE strategic alliance. NSX officials are optimistic that the alliance and the associated technology upgrade of systems will benefit their exchange. There are indications that other SADC exchanges may benefit from the JSE-LSE alliance (see Section IV), although some exchanges have postponed deciding whether to forge technology links with the JSE and NSX, harboring concerns that they will find it too difficult technologically and financially to link to the upgraded systems.

B. How Do these Findings Compare with the Literature?

Other comparable studies that have evaluated whether regional cooperation and/or integration could offer African securities exchanges a way of overcoming impediments to their development have recommended that the exchanges move more quickly and directly toward the ultimate goal of regional integration. In his analysis of whether SADC securities exchanges would benefit from alliances and/or mergers, Okeahalan (2001) concludes that, since the current costs of administering the subregion's exchanges is greater than their benefits, there is a strong economic case for establishing a regional securities exchange. Okeahalan proposes that the most efficient and least costly way of doing this would be through a merger of the Johannesburg Securities Exchange with the much smaller SADC national exchanges, setting up the JSE as a hub for the subregion.

Drawing heavily on the case of the Lusaka Stock Exchange, Mwenda (1999) also recommended setting up a regional exchange in the subregion—among COMESA member exchanges—in the short term as a means of providing an incentive to improve the efficiency

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[14] Okeahalam (2001).

and competitiveness of the subregion's national securities markets. Mwenda went so far as to argue in favor of setting up a regional exchange that would coexist with the subregion's national exchanges, while simultaneously promoting multiple crossborder listings and crossborder investment, to ease liquidity problems on the national exchanges. In stark contrast to Okeahalan's line of reasoning, he argued for maintaining the national exchanges so that they would be able to accommodate prospective issuers unable to afford a listing on the regional stock exchange. Thus, as envisaged, a new regional exchange would target the larger, more highly capitalized companies. Improved information technology across COMESA members would figure prominently in this proposed regional integration scenario, to ensure effective communication and coordination among national exchanges and the regional exchange.

In a World Bank (2002) assessment of the merits of a regional approach to capital market development for the EAC member countries, the study strongly recommends that the three EAC member exchanges consider leveraging a regional market by forging closer links with more developed markets, both within and outside Africa. The study mentions the JSE, and possibly also the Mauritius Stock Exchange, as offering a particularly "good doorway" to closer links with other developed markets. Rather than viewing Tanzania's overlapping memberships in SADC and the EAC as an impediment to further regional cooperation and integration of capital markets, this study sees Tanzania as a "link" between the EAC and SADC in this regard. Among the recommendations for increasing liquidity and further developing capital markets in the EAC, the 2002 study recommends that the three countries "capitalize on complementarities" in their three markets, including notably by "drawing strength" from Kenya's status as having the most developed financial sector and the largest pool of potential demand within the EAC and the potential for supply—in the form of more equity issues—to be sourced increasingly from Tanzania and Uganda, having relatively better economic performance and more scope for future privatizations through the equity markets.

Similar to this paper, the authors of the 2002 World Bank study support EAC Capital Markets Development Committee aims to promote the use of capital markets for carrying out privatizations and encouraging the development of collective investment vehicles. The 2002 study also underscores that regional integration of the EAC exchanges should not progress too rapidly and that there should be "balance" between efforts to integrate regionally and further develop countries' domestic capital markets. Unlike this paper, the World Bank study recommends giving "urgent attention" to bond market development, suggesting that the EAC consider creating a joint debt issuing facility under which all three member governments issue debt.

Table 1. Turnover Ratios for Selected Emerging Market Country Stock Exchanges
(As of December 2004)

Stock exchange	**Turnover ratio (percent)**
Pakistan	40
Turkey	16.5
South Korea	13.4
India	10.3
Thailand	6.9
Brazil	3.5
South Africa	3.5
Mexico	2.4
Mauritius	0.4
Zimbabwe	0.4

Source: Standard & Poor's, *Emerging Stock Markets Review* (March 2005).

Table 2. Market Statistics of SADC Stock Exchanges
(As of December 2004 /1)

Market	**Company listings**	**Market capitalization (US$)**	**Market cap. as % of GDP**	**Turnover ratio (%)**
Botswana	18	2.55 bn	28	0.2
Malawi	9	5.8 bn	386	0.3
Mauritius	41	2.38 bn	38	0.4
Namibia	13	442.3 mn	8	0.4
South Africa	403	455.5 bn	214	3.5
Swaziland	6	183.6 mn	8.7	0.01
Tanzania	7	730 mn	7.6	0.5
Zambia	12	1.65 bn	38	0.4
Zimbabwe	79	1.94 bn	43	0.4

Sources: Standard & Poor's, *Emerging Stock Markets Review* (March 2005); national stock exchanges; EIU *Country Reports* (for GDP data).

/1 Statistics for all operating SADC member exchanges with the exception of the Mozambique Stock Exchange, on which trading activity has been negligible. Data are for December 2004 unless otherwise noted. Data for Tanzania are for February 2005. Data for Malawi and Swaziland are for July 2004. Note that market capitalization for the Malawi Stock Exchange falls to US$119 mn if the foreign company listing OML is excluded.

APPENDIX: Overview of National Stock Exchanges

Botswana Stock Exchange

An informal share market began operating in Botswana in 1989, followed by the establishment of the Botswana Stock Exchange (BSE) in 1995. Both equities and fixed-income securities trade on the BSE. Trading is open outcry and settlement is on a manual T+5 basis (five days after the trade occurs).

As of December 2004, 18 companies were listed on the BSE, down from 19 listings a year earlier. Total market capitalization was US$2.55 billion, up from US$2.06 billion a year earlier. The BSE's turnover ratio is very low, at 0.2 percent. Following South Africa's liberalization of exchange controls in 1986, a number of South African companies have sought dual listings on the BSE. Seven companies were listed on the BSE's foreign index as of December 2004, five companies were listed on the recently established venture capital board, and twenty-three bonds were listed on the BSE.

The government has listed bonds with maturities of 2-, 5-, and 12-years on the BSE since 2003. The issues, which were open to foreign and domestic investors, should help set a benchmark for pricing long-term corporate bond issues and could help boost liquidity.

Foreign investors may own a maximum 55 percent of the share capital issued by a company listed on the exchange; limits on share ownership by individual foreign investors is 10 percent.

Mutual funds operate in Botswana. The exchange has been looking at setting up index-linked funds with the hope of attracting more small investors.

Dar es Salaam Stock Exchange

The Dar es Salaam Stock Exchange was set up in 1998. Trading is open outcry and settlement is on an electronic T+5 basis for equities and T+3 for bonds. As of February 2005, total market capitalization of the DSE was just under US$730 million, up from US$700 million a year earlier. The turnover ratio was 0.5 percent. DSE plans to adopt the automated trading, clearing, settlement, and depository systems being developed by Kenya for the EAC region should go some way toward improving the Tanzanian exchange's market infrastructure and should help to increase liquidity.

As of February 2005, there were seven equity listings on the exchange, up from six equity listings a year earlier. In May 2003, the DSE liberalized its restrictions on crosslistings to allow crosslistings 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.

Until recently, foreign investment in securities issued and traded on the DSE was not permitted by law; the government opened up the stock market to foreign investors in May 2003. Under the Foreign Exchange (Listed Securities) Regulations 2002, foreign investors, with the exception of licensed banks and financial institutions, are permitted to invest in government securities. Foreign investors are able to hold a maximum of 60 percent of the total number of issued securities of any single issuer; this ceiling reportedly is slated to rise at a later stage to 70 percent. The 60 percent ceiling could be exceeded in the event Tanzanians do not invest in some portion of the remaining share of securities issued as a public offer, with prior written approval of the Capital Markets and Securities Authority (CMSA). In the latter event, residents of Kenya and Uganda will be given priority. Securities purchased by an individual foreign investor or two or more investors jointly will not be able to exceed 1 percent of the total number of issued securities of any single issuer; corresponding limits on single or joint share purchases by foreign institutional investors will be 5 percent.

The exchange is also preparing reforms that would encourage wider share ownership in general (e.g., through collective investment vehicles) and reduce listing costs. Collective Investment Schemes Regulations, supplementing the Capital Markets and Securities Act, have been in place for five years and include detailed provisions relating to the roles of fund managers, trustees, pricing, and issuance/redemption of units/shares. The CMSA reportedly is supporting the establishment of two or three mutual funds that are due to begin operating in the near future.

Johannesburg Stock Exchange

South Africa's financial markets are the most highly developed in sub-Saharan Africa. The Johannesburg Stock Exchange (JSE), sub-Saharan Africa's oldest, was set up in 1887 and underwent a major "big bang" reform in the mid 1990s, when the market was opened up to foreign investors and fully automated trading replaced open outcry trading. The JSE has recently undergone further restructuring and reform, including an amendment of its listing requirements and a move to an electronic settlement system, and it has been officially renamed the JSE Securities Exchange.

Since the abolition of apartheid and removal of sanctions in the last decade, foreign investment inflows to the JSE have increased substantially. While the exchange has benefited from these inflows, it also has become more vulnerable to volatility in international financial markets. For example, during the financial crises in Russia and Brazil in 1998, the JSE's overall share index fell by 30 percent in the month of August 1998 alone.

Since May 2002, trading on the JSE has been executed via the JSE SETS (Stock Exchange Electronic Trading Service), a version of the London Stock Exchange's SETS technology, tailored specifically for the needs of the JSE under a business agreement between the two

exchanges. The agreement also aims to allow both exchanges to leverage existing client relationships and promote remote access to crossborder trade in the most liquid securities on each other's markets. At the same time, the deal enables the JSE to retain control over the operation of its market. Market participants in South Africa access the new trading system, which is hosted in London, via a dedicated communications link between Johannesburg and London. The SETS replaced the Johannesburg Equities Trading (JET) system.

Since 1998, the JSE has offered use of its automated trading system, along with technical assistance, to the other SADC exchanges (see Section IV and Appendix). So far, only the Namibian exchange has adopted the JSE's trading system. The SADC exchanges have been looking at how the JSE's trading system might be adopted as the subregion's trading platform, as well as considering other technology options for an integrated network of exchanges.

In 2002, the JSE proposed that other SADC exchanges consider adopting a "JSE model," whereby the JSE provides all or subsets of services—listings, trading, clearing, settlement, surveillance, and information technology—to SADC member exchanges, depending on their level of development. Most recently, the JSE has been in discussions with some other SADC exchanges and one African exchange outside the subregion (Ghana Stock Exchange) on a proposal to set up a so-called pan-African board for trading large companies on a virtual exchange (see Section IV).

Settlement occurs on a T+3 basis via the Share Transactions Totally Electronic (STRATE) settlement system. Since 1998, the exchange has operated an electronic central securities depository system (CDS) that meets international standards.

Derivatives instruments have been traded on South African financial markets since the late 1980s and the South African Futures Exchange (SAFEX) was officially licensed as a derivatives exchange in 1990. The JSE acquired SAFEX in 2001, incorporating SAFEX Financial Derivatives and SAFEX Agricultural Derivatives as two new divisions in its own operations.

In December 2003, the JSE launched its Alternative Exchange (AltX) as a specialized tier for high-growth potential SMEs.

As of December 2004, 403 companies were listed on the JSE , down from 426 a year earlier and 668 in December 1998. However, total market capitalization was US$455.5 billion, up from $263.9 billion a year earlier, since the recent delistings have involved smaller companies. The turnover ratio was relatively low, at around 3.5 percent. In recent years, a number of companies have delisted from the JSE, departing for the London Stock Exchange and other exchanges. Although delistings per year have fallen in number since 2001, a total of 359 companies delisted over the five-year period through end-2003 versus 116 new listings. A large proportion of the JSE's top share listings, including Anglo American, Billiton, Old Mutual, and South African Breweries, have moved their primary listings from the JSE to the LSE, citing a need for access to the LSE's much larger capital market, in line with their aim to become truly global companies.

As of mid 2004, 59 of the companies listed on the JSE had dual listings on overseas exchanges. Twenty-eight of these companies had dual listings on other SADC exchanges (in the vast majority of these cases, the Namibian Stock Exchange). Seeking exposure to a large equity and institutional base, Telkom in 2003 became the fifth South African company to list on the NYSE, which has the world's largest technology and telecommunications marketplace. This secondary listing occurred on the same day as Telkom's primary listing on the JSE. Under its "Khulisa offer," the South African government sought to encourage low-income "historically disadvantaged" individuals and stokvels (community savings clubs) in South Africa to invest in the Telkom IPO, offering Telkom shares at a 20 percent discount to the IPO price (with certain restrictions in the form of maximum application amounts and a three month minimum holding period).

Mutual funds/unit trusts have grown at a rapid rate in South Africa. According to the Association of Unit Trusts of South Africa, total assets under management at June 2003 were estimated at R191.96 billion (up from R178.09 billion a year earlier), with some 80 percent of this amount invested in domestic funds. As of mid 2003, 475 unit trusts were operating in the country, up from 437 a year earlier. The country's largest unit trust manager, Standard Bank Unit Trust, manages more than 17 percent of all unit trusts assets.

Lusaka Stock Exchange

The Lusaka Stock Exchange has been operating since 1994 and is one of the most technologically advanced exchanges in the SADC region. Equities and fixed-income securities trade on the exchange.

Trades are executed via an order matching system, cleared on a T+1 basis, and settled on a T+3 basis. The exchange operates a central share depository system. Trading is open to foreign investors.

Market capitalization on the LuSe was US$1.65 billion at year-end 2004, up significantly from US$768 million a year earlier. However, the turnover ratio remained low at 0.4 percent.

The LuSE launched an "Equity Market Project" in 2000 to encourage more private-sector companies in Zambia to issue shares on the exchange. Under this project, the LuSE identifies potential candidates for listings and organizes workshops to inform the candidates of the benefits of equity listings and to provide information on how to list.

In recent years, the LuSE has been promoting the development and growth of a secondary bond market for government bond issues. The LuSE has teamed up with partner banks to broaden the market's investor base by making government bond issues more accessible to the general public, targeting individuals holding retirement assets as well as NGOs, churches, and companies.

There are no special restrictions on foreign investment in securities traded on the LuSE.

Malawi Stock Exchange

The Malawi Stock Exchange opened in Blantyre in 1996. Equities and government securities trade on the exchange. Trading is open outcry and settlement is on a T+7 basis. As of mid 2004, total market capitalization was US$5.8 billion and nine companies had shares listed on the exchange.

Old Mutual, the South African-based financial services company with its primary listing on the London Stock Exchange, has a secondary listing on the Malawi exchange, as well as the JSE, Zimbabwe, and Namibia exchanges. Old Mutual's share of the MSE's total market capitalization is some 50 times that of the other eight listings combined.

Foreign investment in securities traded on the exchange is subject to a 10 percent limit for any individual investor and a 49 percent aggregate limit. Foreign majority shareholders in companies at the time of listing are exempt from these restrictions.

In 2002, the government launched the National Investment Trust (NITL), managed by First Merchant Bank, to widen share ownership by private Malawians. NITL loans money to Malawians who wish to invest in shares of privatized state-owned enterprises. The government has announced that it intends to set aside 15-25 percent of the share capital in future privatizations for sale to individual Malawians.

Stock Exchange of Mauritius

Incorporated in 1989 as a private limited company, the Stock Exchange of Mauritius (SEM) has benefited from Mauritius's status as an offshore financial center. Forty-one companies were listed on the SEM's Official Market as of December 2004, up from 40 a year earlier. Total market capitalization as of year-end 2004 was US$2.38 billion, up from US$2.12 billion a year earlier. The turnover ratio was 0.4 percent, little changed from one year earlier. The exchange's over-the-counter market has been operating since 1999. Both equities and fixed income securities trade on the SEM. The SEM has been open to foreign investors since 1994.

Trading, clearing and settlement on the SEM are fully automated. The exchange's central depository system (CDS), operating since 1997, provides delivery versus payment on a T+3 basis. Several of the other SADC member exchanges have expressed interest in using the

Mauritian CDS technology (see Section IV). The SEM's automated trading system (SEMATS) has been operating since 2001 and is closely linked with the CDS.

Since the early 1990s, a number of collective investment vehicles and mutual funds have been set up in Mauritius, with a variety of investment objectives.

To attract more smaller investors and develop local capital markets, the SEM sponsors regular radio talk programs and other public education efforts to generate interest and explain stock market investing.

Mozambique Stock Exchange

Launched in 1999 with support from the Lisbon Stock Exchange and the World Bank, the Mozambique Stock Exchange had its first equity listing two years later. In November 2001, most of the government's 30% stakes in the country's leading brewery, Cerveja de Mozambique, were issued on the exchange. As of December 2004, trading activity remained negligible and there had been no further equity listings. Mozambique also lacks an active public debt securities market. Foreign investment in securities traded on the exchange is permitted, but authorization processes reportedly are lengthy and costly.

Nairobi Stock Exchange

The Nairobi Stock Exchange was originally set up in 1953 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 December 2004, 47 companies were listed on the Nairobi Stock Exchange and total market capitalization was US$3.89 billion, down from US$4.18 billion a year earlier. The NSE's turnover ratio remained low at 0.5 percent.

The exchange has three market tiers: Main Investments Market Segment, Alternative Investment Market Segment, and Fixed Income Securities Market Segment. A Futures and Options Market Segment is planned at a later date. Plans also are underway for an over-the-counter market.

The Nairobi exchange currently uses a floor-based open-outcry system to trade both equities and fixed-income securities. Settlement of trades is executed on a T+5 basis.

The exchange plans to replace its manual trading system with an electronic trading system and to introduce a central depository system (CDS). 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 will be the legal entity that will 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.

Shortly after the establishment of the East African Community in 1996, the Nairobi exchange and the EAC arranged for signature of a memorandum of understanding among the three East African countries' exchanges to promote harmonization of capital market policies and regulatory frameworks, development of capital markets, and mutual cooperation and assistance among the countries' financial markets (see Section IV).

In 2002, Kenya's Capital Markets Authority approved two private financial institutions—South African-controlled Old Mutual Investment Services and African Alliance Kenya—to set up mutual funds. Since early 2003, African Alliance has launched three unit trust funds, including a managed fund targeted at small- and medium-sized pension and provident funds. In addition to these new mutual funds, savings and credit cooperative societies (SACCOs), which are similar in operation to mutual funds, pool funds from various investors. Growth of this sector is impeded, however, by a lack of management expertise, accountability, and transparency; illiquidity; and a heavy emphasis on real estate and property investments.

In general, foreign investors are limited to holding a maximum aggregate 75 percent (increased from 40% in July 2002) of the shares issued by any one Kenyan company listed on the Nairobi exchange. This limit may be exceeded, however, in the case of an initial public offering where shares reserved for local investors are not fully subscribed; in this case, with the approval of the Capital Markets Authority, the issuer may allocate those remaining shares to East African and other foreign investors.

Namibian Stock Exchange

An early stock exchange was set up in 1910 in Luderitz, but closed a few years later, coinciding with a diamond prospecting rush in the area. A stock exchange opened in Windhoek in 1992. Thirteen companies were listed on the Namibian Stock Exchange (NSX) as of December 2004 (unchanged from a year earlier), with a total market capitalization of US$442.3 million, up from US$307.7 million a year earlier. Six bonds traded on the exchange in December 2004.

In November 1998, the NSX installed the Johannesburg Stock Exchange's electronic trading system, the Johannesburg Equities Trading (JET) system, via a telecommunications link between the two exchanges. Because of the existing ties between the NSX and the JSE, the JSE's recent business venture with the London Stock Exchange has had implications for the NSX. In May 2002, the NSX joined the JSE in adopting the LSE's trading system technology and began trading on the JSE SETS (see JSE overview above). The NSX is listed on the LSE's

FTSE index and the FTSE calculates and distributes the NSX's indices as part of the JSE/FTSE Africa index series.

More than 70 percent of the equities listed on the NSX have primary listings on the JSE. The vast majority of NSX trading takes place in these dual listed stocks. NSX officials credit the adoption of the JSE's trading system technology with having improved liquidity on the

Namibian exchange: in 1998, annual turnover was just under N$1.04 billion; in 1999, the first full year of trading using the JET system, turnover had nearly doubled to N$2.015 billion.

In 2001, the NSX introduced the JSE's electronic settlement system, STRATE, for settlement of shares that are dual listed on the two exchanges. The JSE and the Namibia exchange are also looking into technology links between their central depository system and other systems (see Section IV).

There are no special restrictions on foreign investment in shares traded on the NSX.

There are some 14 mutual funds operating in Namibia. According to the CEO of the NSX, some 5-10 percent of the country's pension assets are invested in mutual funds and other collective investment vehicles.

Swaziland Stock Exchange

The Swaziland Stock Market (SSM) began operating as an over-the-counter, single broker market in 1990. With the addition of a second broker in 1998, the SSM became a fully fledged exchange and was renamed the Swaziland Stock Exchange (SSX).

Trading, clearing, and settlement systems are manual; trading is executed via a call-over system and settlement is carried out on a T+5 basis. Equities and fixed income securities, including government bonds, are traded on the exchange.

As of mid 2004, six equity issues, six government bonds, and two corporate debt issues (both by SP & Telecoms) were listed on the SSX, with total market capitalization of US$183.6 million, up from US$120.2 million at year-end 2002. Swaziland Empowerment, Ltd. became the sixth company to list shares on the exchange in June 2004.

Nonresidents are not subject to any special restrictions on their investments in securities on the SSX.

Uganda Securities Exchange

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.

Total market capitalization as of December 2004 was US$1.06 billion. As of December 2004, seven equity issues, six government bonds, and one corporate bond were 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, and New Vision

Printing and Publishing. 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 via 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 (see Section IV).

Foreign investors in shares traded on the Uganda exchange are not subject to special restrictions.

The Uganda Securities Exchange has signed a Memorandum of Understanding with the East African Development Bank under which the two institutions aim to set up a US$50 million venture capital fund to help smaller companies that meet certain corporate governance criteria raise funds outside the traditional exchange.

Mutual funds/collective investment vehicles have recently begun operating in Uganda, following passage of the Collective Investment Schemes Act 2003.

Zimbabwe Stock Exchange

The present Zimbabwe Stock Exchange was opened in 1946 in Bulawayo and a second trading floor began operating in 1951 in Harare (now the headquarters). An earlier exchange operated in Bulawayo from 1896-1902.

The ZSE was ranked the best performing emerging market stock exchange for three consecutive years in 1999-01 and the second best performing emerging market exchange in 2002. The ZSE registered an increase of more than 100 percent on the S&P global index for 2002, despite the extremely poor macroeconomic fundamentals of the Zimbabwean economy. This increase was largely attributed to the lack of alternative investment opportunities—particularly the relative unattractiveness of the money market in Zimbabwe's high inflation environment—and the use of the official exchange rate (instead of parallel market rates) in calculating market performance. The volatility of the ZSE became apparent when it suffered steep declines in early 2004, following a sharp hike in nominal interest rates from around 100 percent in November

2003 to 700 percent by the start of 2004. The resultant banking crisis rapidly pushed down the values of all financial services-related stocks.

As of December 2004, 79 companies were listed on the ZSE, down from 81 a year earlier. Market capitalization was US$1.94 billion in December 2004, down dramatically from

US$4.98 billion in December 2003 and US$20.4 billion in early 2003. Foreign investor participation in shares traded on the ZSE has declined over the last five years, in response to eroding property rights, difficulty repatriating earnings because of foreign currency shortages, and a general increase in political and economic uncertainty. The ZSE's turnover ratio was 0.4 percent in December 2004, down from 1.2 percent a year earlier.

Equities and government securities trade on the ZSE. Trading is paper based and executed on an open outcry basis. The ZSE intends to move to automated trading and to adopt a central depository system in future.

Foreign investment in securities traded on the exchange is subject to a 10 percent limit for any individual investor and a 40 percent aggregate limit. A maximum of 15% of an individual investor's hard currency imported to Zimbabwe may be invested in primary share and bond issues.

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