

African Capital Markets Infrastructures

Thomas Murray analyse capital markets infrastructure risk in Africa's financial markets and report on key developments taking place within the region

The capital market infrastructures in Africa represent the most underdeveloped of all regions globally in terms their ability to support efficient clearing and settlement. However, there is a two-tier structure emerging, depending primarily on whether a central securities depository (CSD) has been implemented in the market. CSDs are an integral tool in eliminating the risk exposures involved in holding and transporting physical certificates and documentation for settlement. The markets that have implemented CSDs have benefited enormously from an increased level of confidence among (particularly foreign) investors, which has translated into significantly greater transaction volumes.

In relation to Fig 1, the overall CMIRR rating is a weighted average of the different risk components, including asset commitment risk, liquidity risk, counterparty risk, financial risk, operational risk and asset servicing risk. The CMIRR ratings are assigned to the market infrastructure as a whole, including all CSDs in the market, arrangements for settlement of physical securities, payment systems, local regulations, etc. As we see from the chart, the ratings vary between B and AA-, with the majority rated 'BBB-' or higher.

One can consider the upper tier of African markets, where CSDs operate effectively to reduce custody and settlement risk exposures, to include South Africa, Namibia, (through the blue-chip dual-listings with the Johannesburg Stock Exchange, JSE, which settle in STRATE), Mauritius, Nigeria, the West African French Franc Zone, Zambia, and most recently, Kenya. Of course, these markets are of different complexity and size, and rationally their depositories operate different degrees of sophistication with varying success in custody and settlement efficiency and risk minimisation.

Leading the way in the region, South Africa's depository STRATE, in conjunction with the JSE, the Bond Exchange of South Africa (BESA) and the South African Reserve Bank (SARB), has done much to

revolutionise its market from an inefficient, operationally tricky and opaque market, into one which minimises the custody and settlement risk exposures as well as many of the most developed markets around the world. Work still remains to enhance the market model to best practice standards, most notably in the need to shorten the settlement cycle from T+5, to dematerialise the physical money market and to bring all instruments onto a single book-entry platform in STRATE. However, the infrastructure entities continue to drive the market forward with an aggressive agenda.

Nigeria has experienced enormous growth in the last couple of years as oil revenues and relative political and economic stability have galvanised the market. The Nigerian Stock Exchange (NSE) upgraded its electronic trading systems in January 2007 to cope with this expansion, while the CSCS has been adding to its suite of electronic developments to enhance efficiency and safety in the market (eg electronic bonus distribution and SMS/email trade alerts). Bank reform in 2005/6 shook out the less capitalised groups, strengthening the quality of participants in the payment system.

Since most of the Namibian blue-chip stock is dual-listed on the JSE and settles through STRATE, the Namibian CMIRR rating strongly benefits from the South African model. This is a good example of how a market can circumvent the expensive and difficult challenge of developing its own infrastructure if local concerns of national pride or neo-colonialism can be resolved.

The Zambian market employs two CSDs, one for exchange-traded securities, the LuSE CSD, and the Bank of Zambia, which administers Treasury Bills. The Bank of Zambia also runs the ZIPSS real-time gross payment system, but this is not yet linked to the LuSE CSD, so payments against delivery are still generally made by cheques which take three days to clear. Safekeeping of exchange-traded securities is outsourced to a local custodian.

Mauritius is a prime example of a small market operating a very successful clearing and settlement infrastructure with an inexpensive, but technically proficient, system designed by Millennium Information Technologies (MIT) of Sri Lanka. The success of this system has led to the CDS Mauritius acting as a project development co-ordinator for MIT in implementing trading and settlement platforms in other African markets. In January 2007, the Stock Exchange of Mauritius closed the OTC market, transferring trading to the Development & Enterprise Market (DEM) run on SEM's existing platform. This has resulted in the sector for smaller Mauritian issuers becoming available to foreign investors through a more transparent, efficient trading mechanism.

Kenya is one of a number of markets that has taken advantage of the MIT system and CDS Mauritius' experiences in running it – enabling the Kenyan market, after years of delay, to implement the Central Depository and Settlement Corporation (CDSC) in November 2004. Not only does the CDSC run the MIT depository system, but the Nairobi Stock Exchange (NSE) successfully implemented MIT's Automated Trading System (ATS) in September 2006. These wholesale changes have introduced much needed efficiency and transparency into the entire investment lifecycle and the market is now primed for further development, with the CDSC looking to incorporate government securities into their operations (currently handled by the Central Bank of Kenya) and the NSE considering demutualisation before the end of the year. Plans to merge the NSE, the Uganda Securities Exchange (USE) and the Dar es Salaam Stock Exchange (DSE) continue, with MoU's signed to

promote cross-listing and merger talks beginning in October 2006. If successful, a single central depository will operate for the merged exchange entities.

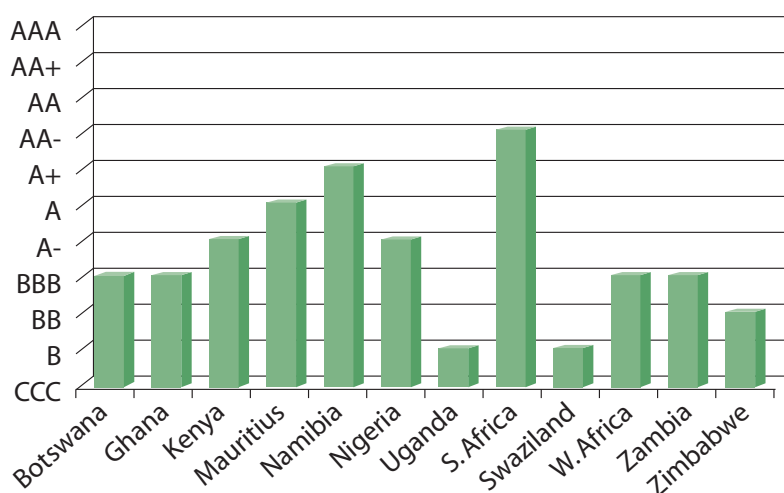
A precedent for such a regional capital market infrastructure operating on a 'hub and spoke' model exists in the West African French Franc Zone. Here the Ivory Coast acts as the hub for the West African Monetary Union markets (Benin, Burkina Faso, Ivory Coast, Mali, Niger, Senegal, and Togo), operating a regional exchange (BRVM) and regional depository (DCBR) located in Abidjan. Considering the size of the markets, this approach has worked relatively well in raising the profile of the member states and encouraging investment through a reasonably efficient market infrastructure. Of course, the benefits of having a single currency (the CFAF linked to the French Franc) and a single central bank, the Banque Centrale des Etats d'Afrique de l'Ouest (BCEAO), give this region an advantage over any East African union in the ease of market consolidation.

The lower tier of markets, which currently lack a CSD for the most liquid instruments (ie listed equities), include Botswana, Ghana, Uganda, Swaziland and Zimbabwe. Although grand projects to enhance many of these markets have been in place for years, the pace of change has been glacial, and several markets still rely on physical custody and settlement practices.

The most likely of these markets to implement a CSD in the near future is Botswana, which has already chosen the depository system (from MIT of Sri Lanka). The review of the Botswana Stock Exchange (BSE) Act necessary for the implementation of the depository is targeted for completion by July 2007 and the depository itself is scheduled for implementation before the end of the year.

Ghana and Uganda are also committed to establishing depositories in the near future. However, both are being held back by outstanding requirements to change securities market laws to provide for a legal basis for the CSD. However, the Ghanaian parliament did pass the CSD Bill on 22 February 2007, but the Bill still requires Presidential approval. In Uganda, unfortunately the Bill on the Central Depository System (CDS) appears to be bogged down in draft form at the Ministry of Finance.

Fig 1: Africa's CMIRR Ratings



Finally, Zimbabwe continues to struggle with the enormous pressures of hyper-inflation and lack of foreign currency reserves. At least one global custodian has had to suspend capital and income repatriations recently owing to lack of foreign currency availability, signifying that the measures brought in by the Reserve Bank of Zimbabwe in 2006 to encourage foreign currency sales into the market have failed. From 1 April 2007, the Zimbabwe Stock Exchange has reduced its settlement cycle to T+5 from T+7 calendar days to combat inflationary effects on the price risks of buy-ins, with the idea to reduce the cycle further to T+3 in July and T+1 in September 2007. While its intention is admirable, the ZSE's unique methodology to calculate the settlement cycle in calendar rather than business days (ie including weekends) is likely to throw up uneven periods of activity in the settlement environment, creating additional operational and liquidity pressures for banks and brokers.

Current Developments

Other important developments in the region include:

Botswana: The Botswana Interbank Settlement System (BISS), a real-time gross settlement payment system, was launched on 17 November 2006. Recent legislative changes have set the foundation for a separate regulator for the non-banking financial services sector. CDS to be implemented by end of 2007.

Ghana: The new Foreign Exchange Act 2006 was passed, liberalising several areas of investment restrictions on foreigners. CDS Bill being passed should act as a catalyst for implementation of the depository. Launch of the Economic Community of West African States (ECOWAS) common currency (the 'Eco'), for Ghana, Nigeria, Gambia and Sierra Leone still on track for December 2009.

Kenya: Possible exchange demutualisation by end of 2007. Proposed implementation of T+3 settlement cycle postponed to June 2007. Plans to create a small/mid-cap OTC market, the Association of Securities Dealers Automated Quotation (ASDAQ) system.

Mauritius: Plans to develop a multi-commodity exchange called the Global Board of Trade (GBot) have been given regulatory approval in principle.

Nigeria: Possible exchange demutualisation by end of 2007. New trading system implemented in January 2007. ECOWAS (see Ghana above)

South Africa: The Government is planning to abolish the Secondary Tax on Companies (STC), replacing it gradually with a dividend tax by 2008. The JSE has been granted permission to establish a South African Rand (SAR) currency futures market. STRATE's Alternate Settlement Model (ASM) programme has been reconfigured to deal with money market instruments, while the wider original scope of ASM has been transferred to the Securities Services Enhancement Model (SSEM). The SSEM will likely include the implementation of a completely new settlement system to act as a single platform for all instruments. STRATE is currently conducting a Request for Information (RFI) exercise with system vendors.

Uganda: East African Exchange merger in preliminary discussion. Bank of Uganda set a maximum cheque value threshold to encourage more use of its electronic payments systems.

Zambia: Project ongoing to link the ZIPSS payment system to the CSD.

Zimbabwe: Gradual reduction of settlement cycle throughout the year, aiming at T+1 in September 2007. ZSE is considering demutualising and self-listing. Disputes between the ZSE and the government over VAT charges on brokerage activities, and between the ZSE and the central bank over regulatory responsibilities, are still ongoing. ■

CMIRR Ratings Definitions:

AAA	extremely low
AA+	} very low
AA	
AA-	
A+	} low
A	
A-	
BBB	acceptable
BB	less than acceptable
B	quite high
CCC	high
CC	very high
C	beyond any acceptable level of risk exposure