Investment Basics XLIV: Review of African stock markets

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1. Introduction

The emergence of African stock markets was mostly driven by the desire to privatise state-owned enterprises. This emergence is concentrated between the late 1980s and early 1990s, a period that witnessed a number of financial liberalisation programs in Africa (Bekaert and Harvey, 2001). Privatisation raised the prospects of fully integrating Africa into the global economy (Mate, 2000). With the shift of interest from foreign direct investment (FDI) to foreign portfolio investment (FPI) (Mate, 2000), the stock market is an important tool for the flow of FPI into Africa. Africa's low levels of economic growth (average of 2,2% from 1978 to 1985, and 2% from 1986 to 1993) and high debt levels (15% of developing world total debt) have not been associated with thriving equity markets (Erb, Harvey and Viskanta, 1996).

2. General overview

There were only 7 stock markets in Africa before 1988 and these increased to 20 in 2000. Table 1 below shows the years of establishment and the levels of development in terms of size and liquidity of African Stock Markets.

Egypt's Alexandra and Cairo Stock Exchanges were established in 1888 and 1903 respectively but had their operations suspended between 1961 and 1992. The Lusaka Stock Exchange was established with assistance from the International Finance Corporation (IFC) and World Bank in 1993. However, trading on this exchange only started in 1994.

The Botswana share market officially became the Botswana Stock Exchange in 1995. On this exchange, private companies account for less than 10% of total market capitalisation (Tyandela and Biekpe, 2001).

Africa also boasts of having the first regional stock exchange, the Bourse Regionale des Valeurs Mobilieres (BRVM) in Cote d'Ivoire. This exchange serves the 8 French-speaking (francophone) member countries of the West African Economic and Monetary Union (UMOEA), namely Benin, Burkina Faso, Cote d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. The BRVM started with a listing of 35 companies and a total market capitalisation of 2904 billion CFA francs.

Other regional exchanges are under consideration with one planned for East Africa to serve countries such as Kenya, Tanzania and Uganda. These countries already have stock markets with Kenya's Nairobi Stock Exchange the most established among the three. An integrated real time network for SADC stock exchanges is expected to be up and running by the year 2006 (Tyandela and Biekpe, 2001). A SADC Committee of Stock Exchanges was formed in January 1997 for this purpose. Stock exchanges in the SADC are adopting the listing requirements of the Johannesburg Stock Exchange (JSE) in preparation for this integrated network. The JSE is fully computerised and has offered to give technical assistance to other exchanges in the SADC. The JSE has the majority (70%) of listed stocks in the SADC followed by the Zimbabwe Stock Exchange (ZSE) (Tyandela and Biekpe, 2001). However, the Namibian and Botswana stock exchanges are larger than the ZSE in terms of market capitalisation.

In all, there are more than 2077 listed firms on African stock exchanges (Tyandela and Biekpe, 2001). Even though Egypt has the majority of listed stocks in Africa, only about 90 of the 1100 stocks are actively traded (Tyandela and Biekpe, 2001). Egypt has a much lower market capitalisation than the Johannesburg and Namibian stock exchanges, which are comparatively smaller in terms of listed stocks (660 and 42 respectively).

3. Investment regulations and reforms

The macroeconomic and political environments, legal, regulatory, accounting, tax and supervisory systems influence stock market liquidity. Stock market liquidity is an important factor in attracting foreign portfolio investment. Most African stock markets still have restrictive capital flow regulations on the remittance of capital, capital gains, dividends, interest payments, returns and other related earnings thereby constraining foreign investment. Liberalising these restrictions would make the markets more attractive to foreign investors and this can accelerate economic growth by enhancing stock market liquidity. For instance, Chile's liberalisation of equity markets to foreign investment in 1992, contributed to the economy's growth of 6,3% per year (Bekaert and Harvey, 2001).

Liberalisation increases investment as foreign investors diversify their portfolios driving up local equity prices and reducing the cost of capital (Bekaert and Harvey, 2001). For countries undertaking structural reforms, total market capitalization would largely increase as big utilities are being privatised. Wide-ranging reforms, from legislative to economic, are taking place on Africa's equity markets as part of the liberalisation process.

Table 1: Summary statistics of African stock markets

Country/ Stock exchange	Year established	Market capitalisation$m (Jan 2000)	Value traded/ GDP (Jan 2000)	Turnover ratio(Jan 2000)
Botswana	1989	16501	0,6	4,8
Cote d'Ivoire (BRVM)	1998	1185	0,8	2,6
Egypt (Cairo & Alexandria)	1992	33515	10,1	34,7
Ghana	1989	944	0,3	1,5
Kenya (Nairobi)	1954	1475	0,7	3,6
Malawi	1996	8054	-	-
Mauritius	1988	1462	1,8	5,0
Morocco (Casablanca)	1929	13461	7,2	9,2
Mozambique (Maputo)	1999	N/A	N/A	N/A
Namibia	1992	42018	0,7	4,5
Nigeria	1960	2942	0,4	7,3
South Africa (Johannesburg)	1887	198006	55,6	33,9
Sudan (Khartoum)	1994	-	-	-
Swaziland	1990	76	-	-
Tanzania	1988	176	0,1	3,4
Tunisia	1969	2823	2	23,3
Uganda	1998	-	-	-
Zambia (Lusaka)	1994	276	0,4	4,7
Zimbabwe	1896	12460	4	10,8

Source: Africa Centre for Investment Analysis

Bekaert and Harvey (2001) stressed the importance of financial liberalisation on economic growth. They showed that the effect of financial liberalisation on economic growth continues to be significant even when inflation, stock market development, change in dividend yields and credit ratings are considered. They also pointed out that the enforcement of insider trading laws would not diminish the impact of financial liberalisation on economic growth.

4. Liquidity and efficiency

African Stock Markets (excluding JSE) are very illiquid. However, liquidity is an important factor in the role of stock markets in promoting economic growth. The integration of African stock markets and the introduction of regional stock exchanges will promote cross-border listings and thus stimulate increased liquidity across markets.

Levine (1996) pointed out that liquid equity markets make investment less risky and more attractive. Liquid markets facilitate longer-term, more profitable investments and thus improve the allocation of capital. This enhances the prospects for long-term economic growth. The other measures of stock market development such as size and volatility have not proved to be good predictors of economic growth or performance (Levine, 1996). Stock market liquidity implies more investment. In developing countries liquidity is linked to an increase in capital flow through bonds and bank loans and as a result corporate debt-equity ratios rise with market liquidity.

African stock markets are also, in general, known to be inefficient. However, there are reforms underway in an effort to make them more liquid and more efficient. These reforms include, among other things, the shift from the open-outcry system to the use of electronic trading systems and stringent regulatory conditions that prohibit insider trading.

5. Integration with global equity markets

The general perception is that emerging markets are segmented resulting in higher cost of capital, which is related to local volatility. Globally integrated markets are larger, more liquid and volatile and are associated with lower cost of capital, improved credit ratings, real exchange rate appreciation and thus increased economic growth.

The segmentation of African stock markets is partly due to restrictions on foreign investments. As a result of this segmentation, African markets lack contagion with global emerging markets thereby making them a better way of diversifying one's portfolio. For instance, African markets were not contagiously affected by the Asian crisis due to their lack of interdependence with other global emerging markets (Collins and Biekpe, 2001). The JSE is the only market in Africa that has a strong relationship with global emerging markets (Collins and Biekpe, 2001). Stock prices in many developing countries, however, tend to be closely correlated to country factors such as currencies and interest rates (Pension Fund Indicators, 2001).

6. Risk and expected returns

Foreign portfolio investments on African stock markets are restricted by factors such as foreign exchange risk, political risk, low liquidity and other informational and institutional barriers.

Erb, Harvey and Viskanta (1996) used risk ratings from country risk and credit ratings providers to estimate pooled time-series cross-sectional regression models of returns, volatilities and correlations using a sample of 49 equity markets for the period April 1984 to March 1996. From the regression results, they then estimated the expected returns, volatilities and correlations for 34 African countries including those without equity markets. These estimates and the risk ratings used are shown in Table 2 where the countries with equity markets in 1995 are in bold and italics.

Table 2: African countries' economic growth, risk ratings, expected returns, volatility and correlation with world

Country	Real GDP change 1995 (%)	Inflation change 1995 (%)	Risk Ratings*						Expected Excess Return (%)	Expected Annual Volatility (%)	Expected Correlation With world
			ICRGC	ICRGP	ICRGF	ICRGE	EMCRR	IICCR			
Algeria	3,9	16,3	56	50	38	25	37	22	18,7	36,6	0,00
Angola	9,2	43,0	52	50	23	32	20	13	20,0	39,4	-0,05
Botswana	***4,4***	***9,1***	***77***	***72***	***40***	***42***	***58***	***50***	***13,3***	***24,4***	***0,32***
Burkina Faso	4,5	7,8	58	54	28	35	41	16	18,1	35,2	0,03
Cameroon	3,1	26,9	57	51	29	34	34	19	18,4	35,9	0,02
Congo	0,9	8,9	57	57	29	27	23	14	18,6	36,3	0,01
Cote d'Ivoire	***6,5***	***14,2***	***60***	***59***	***29***	***32***	***41***	***17***	***17,6***	***33,9***	***0,06***
Egypt	***3,2***	***9,4***	***69***	***59***	***40***	***39***	***49***	***34***	***15,2***	***28,6***	***0,19***
Ethiopia	5,5	11,4	61	59	26	37	31	15	17,3	33,3	0,07
Gabon	2,8	10,9	66	59	35	38	39	25	15,9	30,3	0,15
Gambia	-4,0	5,0	59	56	24	38	34		17,8	34,6	0,05
Ghana	***4,5***	***58,1***	***66***	***65***	***33***	***34***	***50***	***29***	***15,9***	***30,3***	***0,15***
Kenya	***5,0***	***1,7***	***67***	***67***	***34***	***33***	***44***	***27***	***15,7***	***29,7***	***0,16***
Libya	1,2	30,0	67	59	34	42	23	7	15,7	29,7	0,16
Malawi	9,9	56,5	61	64	28	29	39	20	17,4	33,6	0,07

Mali	6,0	12,4	56	58	19	36	34	17	18,7	36,6	0,00
Mauritius	***4,1***	***6,1***					***55***	***50***	***18,5***	***30,1***	***0,16***
Morocco	***-6,0***	***6,6***	***68***	***65***	***38***	***33***	***54***	***39***	***15,4***	***29,1***	***0,17***
Mozambique	4,3	44,3	50	56	25	19	25	13	20,6	40,9	-0,07
Namibia	***1,7***	***9,3***	***76***	***80***	***31***	***41***	***28***		***13,6***	***24,9***	***0,30***
Niger	3,0	10,5	49	47	26	24	33		21,1	42,1	-0,09
Nigeria	***2,9***	***73,5***	***53***	***54***	***23***	***29***	***32***	***15***	***19,7***	***38,7***	***-0,03***
Senegal	4,5	8,0	61	59	29	33	39	22	17,4	33,6	0,07
Sierra Leone	-10,0	29,1	43	39	16	31		8	23,2	46,7	-0,16
Somalia	5,4	16,3	29	28	10	20	18		29,8	61,9	-0,33
S. Africa	***3,4***	***8,9***	***76***	***74***	***40***	***38***	***65***	***46***	***13,6***	***24,9***	***0,30***
Sudan	***4,2***	***85,0***	***32***	***29***	***14***	***21***	***24***	***7***	***28,2***	***58,1***	***-0,29***
Tanzania	***4,5***	***22,0***	***64***	***64***	***33***	***31***	***32***	***18***	***16,5***	***31,5***	***0,12***
Togo	8,3	14,7	55	51	28	30	30	17	19,2	37,6	-0,02
Tunisia	***3,5***	***6,2***	***70***	***70***	***36***	***31***	***65***	***45***	***15,0***	***28,0***	***0,21***
Uganda	6,5	6,5	55	52	25	32	42	15	19,2	37,6	-0,02
Zaire	-0,7	533,3	40	34	14	31	18	7	24,6	50,0	-0,20
Zambia		***30,0***	***62***	***65***	***29***	***31***	***35***	***16***	***17,0***	***32,7***	***0,09***
Zimbabwe	***-1,1***	***23,0***	***61***	***62***	***28***	***32***	***50***	***32***	***17,3***	***33,3***	***0,07***
Average	3,2	36,9	58	57	28	32	38	22	18,4	35,6	0,05
Median	4,1	13,3	60	59	29	32	35	17			

Sources: World Economic Outlook, International Monetary Fund May 1996

Erb, Harvey and Viskanta (1996)

* On the risk ratings, a scale of 0 – 100 is used. A higher score indicates lesser risk and a score of 100 represents maximum creditworthiness.

Key to Table

ICRGC International Country Risk Guide Composite Rating (5/96)
ICRGP International Country Risk Guide Political Rating (5/96)
ICRGF International Country Risk Guide Financial Rating (5/96)
ICRGE International Country Risk Guide Economic Rating (5/96)
EMCRR Euromoney Country Risk Ratings (3/96)
IICCR Institutional Investor Country Risk Ratings (3/96)

Erb, Harvey and Viskanta (1996) concluded from their analysis that higher expected returns for individual countries come together with higher expected volatilities. Table 2 shows that, in 1995, the average expected return and volatility for Africa were quite high, 18,4% and 35,6% respectively and the average correlation was very low (0,05%). The high returns and low correlations with world markets make Africa attractive to investors. The low correlations also make African Stock markets good portfolio diversifiers.

7. Performance

One of Africa's greatest achievements is to have some of its stock exchanges ranked as top performers among emerging markets. The Egyptian Stock Exchange ranked fifth in the world in the 1940s whilst Ghana was ranked the sixth best performing emerging stock market in 1993. The Zimbabwe and Lusaka Stock Exchanges were crowned star performers in 1996 and 1997 respectively.

The most active stock markets in sub-Saharan Africa include Zimbabwe, Mauritius, Nigeria, Ghana, Kenya and Botswana. Table 3 below shows that the returns of these markets in April 2001 rose by 6,3%; 1,4%; 7,1%; 1,3%; 3,1% and 4,5% respectively in US$ terms. The parallel market exchange rate was used in converting Zimbabwean returns into US dollars. Nigeria had the highest market capitalisation of US$3,8 billion in April 2001 whilst the Botswana market, which is growing in prominence, had a capitalisation of US$1,1 billion.

Table 3: Size, dividends and returns for selected stock markets

April-01	Market CAP	P/E	Dividend	Price book	US$ return

	US$ m	%	Historic	Forward	Yield	Cover		2001(YTD)	Apr 2001	2000
S. Africa										
Industrials								-21,1%	12,9%	-28,6%
Gold								23,6%	18,8%	25,8%
All Share								-8,6%	11,5%	50,2%
Zimbabwe	2525	22,4%	17,8	12,0	2,0%	2,97	5,98	21,8%	6,3%	-19,9%
Mauritius	1309	11,7%	8,6	7,5	6,5%	2,37	1,09	0,4%	1,4%	-18,2%
Kenya	1193	10,6%	9,3	7,5	9,4%	1,41	1,31	-0,7%	-3,1%	-22,5%
Botswana*	1106	9,8%	12,4	10,0	5,9%	1,59	5,75	18,8%	4,5%	10,3%
Namibia*	228	2,0%	7,4	8,5	5,4%	2,34	2,21	-16,8%	1,3%	52,3%
Malawi	177	1,6%	3,2	2,5	7,1%	2,35	1,26	2,8%	1,0%	37,8%
Zambia	141	1,3%	12,4	8,0	6,9%	1,55	5,35	28,8%	-3,7%	4,9%
Tanzania	219	1,9%	3,5	3,0	10,2%	1,06	1,48	-4,7%	-3,5%	0,1%
Nigeria	3835	34,2%	18,7	12,0	3,9%	2,01	4,97	8,6%	7,1%	41,7%
Ghana	504	4,5%	5,1	3,5	8,5%	2,43	2,43	1,2%	-1,3%	-43,9%
Region ex SA	**11226**	**100%**	**14,3**	**10,0**	**5,0%**	**2,16**	**4,14**	**9,0%**	**4,0%**	**1,5%**

Source: Business in Africa, June 2001

* Exclude companies with dual listing on the JSE

8. Growth potential

Global capital flows into emerging markets are attracted by the higher growth potential of these markets (Pension Fund Indicators, 2001). The ability of emerging (including African) markets to attract investors, despite the extra risks, rests upon the relatively high returns on investments in these markets. These returns arise from the fact that many business opportunities in these markets still remain unexploited. This is due to restricted access to markets, poor technological endowment, policy mistakes, or political instability (Pension Fund Indicators, 2001). The attractiveness of emerging markets is enhanced by the efforts being made to redress these legacies.

African stock markets are relatively small in terms of number of listed companies and market capitalisation in comparison with other global emerging markets. The markets are still in the embryonic stages of development with potential for significant growth. The only exception is South Africa, whose market capitalisation is ten times the combined capitalisation of the rest of African stock markets, and over 100 times their average (Senbet, 2000). Taken individually, African stock markets are limited in resource mobilisation, whilst taken collectively they have some potential for significant future growth.

Conclusion

African stock markets have rapidly increased in number since 1989. This rapid increase came with the efforts to privatise state-owned enterprises. African markets are still young and segmented and lack contagion with global emerging markets. Expected returns are quite high on African stock markets making them attractive to international investors. However, African markets are also characterised by poor liquidity and market inefficiency. This, coupled with unfavourable laws and regulations, political instability, foreign exchange and convertibility risk, taxation, limited share acquisitions and restrictions on foreign portfolio investment have constrained the growth of these markets. Relaxing or eliminating investment restrictions will promote foreign portfolio investments resulting in improved liquidity and efficiency. This will give African stock markets increased growth potential and enhance their role in economic growth.

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