

Schiereck, Dirk; Freytag, Andreas; Grimm, Maximilian; Bretschneider, Wolfgang H.

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Public Corporations in Africa – A Continental Survey on Stock Exchanges and Capital Markets Performance

by

**Dirk Schiereck
Andreas Freytag
Maximilian Grimm
Wolfgang H. Bretschneider**

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Public Corporations in Africa – A Continental Survey on Stock Exchanges and Capital Markets Performance

Dirk Schiereck (corresponding author)

Chair of Corporate Finance, Darmstadt University of Technology, Hochschulstrasse 1, 64289 Darmstadt, Germany, Phone: 0049 6151 16 24291, Email: schiereck@bwl.tu-darmstadt.de Darmstadt, Germany

Andreas Freytag

Chair for Economic Policy, Friedrich-Schiller Universität Jena, Jena, Germany, University of Stellenbosch, CESifo Research Network

Maximilian Grimm

Chair of Corporate Finance, Technische Universität Darmstadt, Darmstadt, Germany

Wolfgang H. Bretschneider

Chair for Economic Policy, Friedrich-Schiller Universität Jena, Jena, Germany

Abstract: While mature capital markets in Western economies suffer from a significant drop in listed companies for two decades, the number of listings at stock exchanges on the African continent is increasing and the importance of stock exchanges for equity issues is growing. This not only raises questions about the future of stock exchanges as platforms to raise equity in different countries (Doidge et al., 2017; Kahle and Stulz, 2017). It also sheds light on the growing importance of African markets for Western actors. The capital markets in Africa, however, are dominated by a very few large stock exchanges while most of the markets are small and underdeveloped based on international standards. The paper serves the purpose of identifying the potential of African stock markets

JEL Code: G10 and G23

Keywords: African capital markets, stock exchange, performance, listings

1 Introduction

African economies have become subject of intense studies as well as rising interest of the business community around the globe. In September 2018, the Chinese government used the China-Africa Forum to announce another three-year-round of investments projects worth 60 bn US-\$ annually. Whereas the politics of this announcement raise concern in many quarters, it shows that African markets are becoming increasingly relevant for global players.

This observations comes at a time when the Western capital markets are somewhat stagnating if not declining, at least when concentrating on corporate finance. The number of publicly listed corporations in most North American and Western European capital markets is dramatically decreasing for two decades. Doidge, Karolyi and Stulz (2017) document that the number of listed firms in the US peaked in 1997, dropped since that by half, resulting in fewer listings than 40 years ago. Gaar and Schiereck (2013) report similar numbers for Germany. Kahle and Stulz (2017) argue that this trend goes in line with a transformation of the US to an economy dominated by service industries. In these industries, the number of overall existing firms increased heavily since 1995 and employment in these sectors increased even stronger but the number of listed firms dropped by more than a third.

While the consequences of these findings will be in the center of academic research and discussed for years to come, a confrontation of these numbers with developments in other less developed parts of the world can provide new ideas for explanations for the long-run future of organized capital markets, which have the potential to gain consensus support. However, looking for surveys about the listing history of public companies in African capital markets reveal a severe lack of even comprehensive status quo information on listings and recent performance. Our study addresses this research gap and provides a detailed summary with the numbers of listed companies at each African stock exchange, the average performance of the main stock indices at these exchanges and a short introduction into the historical roots of the markets. Based on this data base future research will find an easier access to institutional settings whose analyses can help to understand the general question on the role of organized stock markets in the life cycle of developing economies.

The rest of the paper is organized as follows. In section 2, we give a survey on stock exchanges in Africa at the end of 2016. For these exchanges section 3 will provide detailed listing and performance information split for all relevant geographic subregions. Section 4 will aggregate the information, and section 5 concludes and gives an outlook.

2 Financial Markets in Africa

While the African capital markets still lack, quantitative research in an appropriate range there is nevertheless a well-diversified landscape of capital markets and stock exchanges that is steadily growing. Some of these markets are already more than a hundred years old and provide investors and companies with access to equity capital, bond markets or derivatives trading. They allow executing financial transactions through well-established trading platforms and guaranteeing efficiency and security through state-of-the-art regulating authorities. Other markets are still young, list only a handful of securities and consider a dozen trade executions per week as a peak market trading activity.

Overall, there are 30 organized stock exchanges on the African continent where securities can be listed. These exchanges represent the capital markets of 40 African nations or around 74% of Africa’s sovereign countries (as of today, Africa consists of 54 fully recognized states that are acknowledged by the United Nations and are currently UN members (“United Nations”, 2017)). The oldest African Exchange is the Alexandria Stock Exchange in Egypt that opened its business back in 1883 and today forms the Egyptian Exchange (together with the 1903 established Cairo Stock Exchange). The two youngest stock exchanges are the ALTX East Africa Exchange in Uganda and the Maseru Securities Exchange in Lesotho, which both officially started their operations in 2016. Africa’s largest stock exchange in terms of market capitalization is the Johannesburg Stock Exchange (JSE) in South Africa with a market cap of around 1 trillion USD and also the 19th largest stock exchange in the world as of the end of the year 2013, according to the JSE itself (“JSE”, 2017a).

One of the most important institutions to supervise Africa’s financial markets is the **African Securities Exchange Association** (ASEA), which is the premier association of 25 securities exchanges on the African continent (“ASEA”, 2017a). It was established in Nairobi (Kenya) in 1993 and aims to enhance the development and unlock the potential of the African capital markets. The ASEA provides a platform and framework for its members to exchange information and realize a sustainable growth across Africa’s economies. To become a member of the ASEA, applicants must fulfill a number of requirements, such as being a significant securities or derivatives exchange with an active market, being regulated by a supervisory body under a statutory framework, having been actively trading securities for a minimum of one year and complying with the Articles of Association of the ASEA. A limited number of African exchanges are also current members of the World Federation of Exchanges (WFE) which is a global institution to supervise financial markets worldwide.

Next to the ASEA and the WFE, there are a number of important exchange associations that are focusing on the local capital markets of different African regions. Among the most important ones are the **Arab Federation of Exchanges** (AFE), the **Association des Bourses Francophones d’Afrique** (ABFA), the **West African Capital Markets Integration Council** (WACMIC) and the **Committee of SADC Stock Exchanges** (CoSSE). Table 1 offers the full list of all current African stock exchanges:

Table 1: Survey on All African Stock Exchanges

#	Economy	Stock Exchange	Short	Location	Currency	Founded
1	Algeria	Algiers Stock Exchange	SGBV	Algiers	DZD	1997
2	Botswana	Botswana Stock Exchange*	BSE	Gaborone	BWP	1995
3	Cameroon	Douala Stock Exchange*	DSE	Douala	XAF	2001
4	Cabo Verde	Bolsa de Valores de Cabo Verde*	BCV	Praia	CVE	2005
5	CEMAC	Bourse Régionale des Valeurs Mobilières d’Afrique Centrale	BVMAC	Libreville (Gabon)	XAF	1994
6	Egypt	Egyptian Exchange*	EGX	Cairo/ Alexandria	EGP	1883

#	Economy	Stock Exchange	Short	Location	Currency	Founded
7	Ghana	Ghana Stock Exchange*	GSE	Accra	GHS	1990
8	Kenya	Nairobi Securities Exchange*	NSE	Nairobi	KES	1954
9	Lesotho	Maseru Securities Exchange	MSM	Maseru	LSL	2016
10	Libya	Libyan Stock Market*	LSM	Tripolis	LYD	2007
11	Malawi	Malawi Stock Exchange*	MSE	Blantyre	MWK	1996
12	Mauritius	Stock Exchange of Mauritius*	SEM	Port Louis	MUR	1988
13	Morocco	Casablanca Stock Exchange*	CSE	Casablanca	MAD	1929
14	Mozambique	Bolsa de Valores de Moçambique*	BVM	Maputo	MZN	1999
15	Namibia	Namibia Stock Exchange*	NSX	Windhoek	NAD	1992
16	Nigeria	Nigerian Stock Exchange*	NGSE	Lagos	NGN	1960
17	Rwanda	Rwanda Stock Exchange*	RSE	Kigali	RWF	2005
18	UEMOA	Bourse Régionale des Valeurs Mobilières*	BRVM	Abidjan (Côte d'Ivoire)	XOF	1998
19	Seychelles	Seychelles Securities Exchange*	Trop-X	Victoria	SCR	2012
20	Sierra Leone	Sierra Leone Stock Exchange*	SLS	Freetown	SLL	2009
21	Somalia	Somali Stock Exchange	SSE	Garowe	SOS	2015
22	South Africa	Johannesburg Stock Exchange*	JSE	Johannesburg	ZAR	1887
23	Sudan	Khartoum Stock Exchange*	KSE	Khartoum	SDG	1994
24	Swaziland	Swaziland Stock Exchange*	SSX	Mbabane	SZL	1990
25	Tanzania	Dar Es Salaam Stock Exchange*	DSE	Dar Es Salaam	TZS	1998
26	Tunisia	Bourse de Tunis*	BVMT	Tunis	TND	1969
27	Uganda	Uganda Securites Exchange*	USE	Kampala	UGX	1997
28	Uganda	ALTX East Africa Exchange	ALTX	Kampala	UGX	2016
29	Zambia	Lusaka Securities Exchange*	LuSE	Lusaka	ZMK	1994
30	Zimbabwe	Zimbabwe Stock Exchange*	ZSE	Harare	ZWD	1946

Source: Own research, websites of respective stock exchanges, website of ASEA as of April, 2017

The **Communauté Économique et Monétaire de l'Afrique Centrale** (CEMAC) consists of Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon, while the **Union Économique et Monétaire Ouest Africaine** (UEMOA) includes the West African states Benin, Burkina Faso, Guinea Bissau, Côte d'Ivoire, Mali, Niger, Senegal and Togo. The remaining 14 African countries without an official stock market are Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Liberia, Madagascar, Mauretania, São Tomé & Príncipe and South Sudan.

Stock Exchanges, that are current members of the ASEA are indicated with an asterix (*) behind the respective exchange's name in the table above (for reference of members, see "ASEA", 2017b). Three stock exchanges in Africa are at the same time public companies with its shares traded on the respective exchange itself: the Johannesburg Stock Exchange in South Africa, the Nairobi Securities Exchange in Kenya and the Dar Es Salaam Stock Exchange in Tanzania, with other exchanges planning or initiating steps to follow the lead such as Namibia and Uganda.¹ In extension to Table 1, there are two commodities exchanges in Africa: the Abuja Securities and Commodities Exchange in Abuja (Nigeria) and the Agricultural Commodities Exchange of Zambia (ZAMACE). Additionally, the newly launched ALTX East Africa Exchange in Kampala (Uganda) will be primarily used for the trading of commodities as well (Busulwa, 2016).

¹ For reference, see Elinaza (2015), Kaira (2016) and "Kenyan Wall Street" (2016).



Figure 1: Map of African Financial Markets

The stock exchanges in Africa have been established in three major waves or cycles. First, there is a number of countries, which operate a stock exchange with a rather long history. They were already founded in the late 19th century or in the first three quarters of the 20th century. Among these are for example Egypt, Morocco, Tunisia, Nigeria, Kenya and South Africa. In a second wave, a large number of African exchanges have opened their operations in the 1990's, such as in Botswana, Namibia, Zambia, Tanzania, Ghana as well as the UEMOA and CEMAC. The third and most recent wave has started during the last decade with the openings of exchanges in smaller economies such as Cabo Verde, Rwanda, Lesotho, Somalia and Sierra Leone. Geographically, the landscape of financial markets in Africa can be depicted in Figure 1 with green colored countries indicating that the respective country has an organized capital market.

3 Financial Markets in Africa

The single African organized financial markets will be introduced in more detail in the following. In order to obtain a better structure, we split the presentation into three parts: The first part covers North Africa and presents the Arab African countries, the second part examines the financial markets

of West Africa and the third part outlines all the remaining markets of Sub-Saharan Africa, which is further split to handle the volume of markets.²

3.1 Arab African Countries

North Africa, as defined within this study, consists of the Arab African countries Morocco, Algeria, Tunisia, Libya, Egypt and Sudan. Each of these countries has an organized stock exchange. The North African countries with an official capital market are coloured green in the following Figure 2:

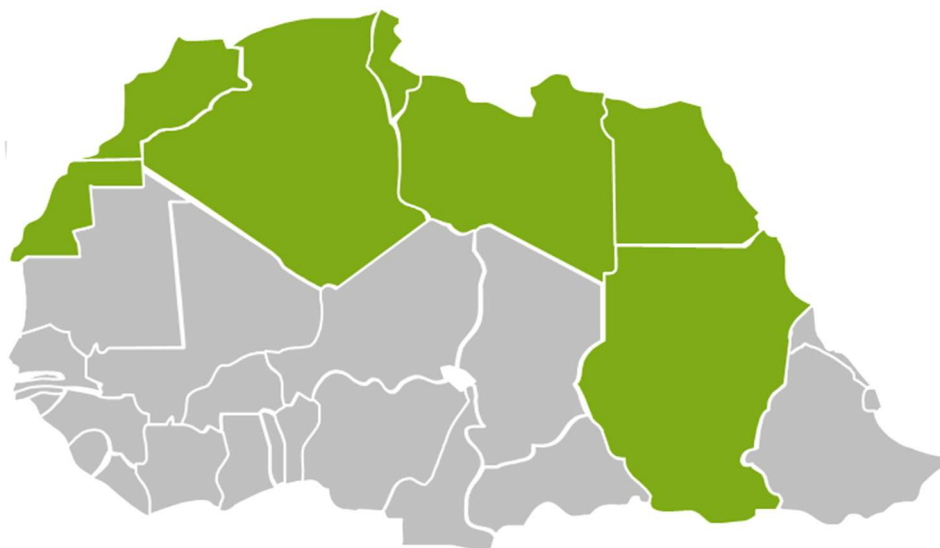


Figure 2: Map of Arab African Financial Markets

The stock exchanges in North Africa are almost all members of the **Arab Federation of Exchanges (AFE)** with the exception of Algeria. The AFE was established with its headquarters in Beirut (Libanon) in 1978 to be a guiding regulatory institution for the stock exchanges and capital markets in the arab world (“AFE”, 2017a). The members are the local exchanges in the Middle East and North Africa Region (MENA) with prominent local members such as the trading places in Abu Dhabi, Dubai, Amman, Beirut or Muscat (for a full list of AFE member exchanges, see “AFE”, 2017b). The membership of the North African stock exchanges in the AFE demonstrates the strong integration of the North African economies and capital markets in the arab world. Another regional union is the **Association des Bourses Francophones d’Afrique (ABFA)** which was formed in 2011 and currently consists of the stock exchanges of Morocco, Tunisia and Cameroon. The aim of the ABFA is to enhance the integration of capital markets across its members primarily through an advantageous use of the French language that all members have in common.

The financial market in Morocco is organized on the **Casablanca Stock Exchange (CSE)**. Trading activity takes place in two market segments, the *Marché Central* (Central Market) and the *Marché du Bloc*, where OTC trades can be executed (Sieper, 2008, p. 339). The Stock Exchange in Casablanca is

² Sub-Saharan Africa based on UN counting consists of 49 of 54 African countries that are located partly or in whole south of the Sahara. Within this paper, Sub-Saharan Africa excludes West African States since they are covered separately.

one of the oldest in Africa (established in 1929) and also one of the largest in terms of market capitalization (“ASEA”, 2017d). As of the end of 2016, there are 75 companies listed on the CSE. The main equity index representing the stock exchange in Casablanca is the Morocco All Share Index (MASI) which is complemented by the MADEX Float Index, FTSE CSE Morocco 15 Index as well as different sector indices (“CSE”, 2017b). The total market capitalization as of March 2017 amounts to 580 bn Moroccan Dinar (MAD) which equals approximately 58.5 bn USD (“CSE”, 2017a). The CSE also features an active debt capital market which is mainly comprised of corporate bonds.

Geographically to the east of Morocco is Algeria, whose capital market is represented on the **Société de Gestion de la Bourse des Valeurs d’Alger** (SGBV), or more commonly known as Bourse d’Algerie. The stock market is small with only five listed companies in the main market of the SGBV. Next to the main market, the Bourse d’Alger has a corporate bond market, SME³ market and treasury bond market for Algerian sovereign bonds. The Algerian financial market is extremely small and illiquid with a market capitalization of 45 bn Algerian Dinar (DZD), which is equal to only 412 million USD as of March 2017. The market cap between February and March 2017 has also only varied by 432 million DZD (ca. 4 million USD; source: “SGBV”, 2017), indicating very little trading activity.

The smallest country in North Africa by size is Tunisia where the **Bourse des Valeurs Mobilières de Tunis** (BVMT) is the local financial marketplace. The stock exchange (another popular name is Bourse de Tunis) was founded in 1969 and currently lists 82 companies, an increase of 28 IPO’s from the 54 listed companies in 2008 (for reference, see Sieper, 2008, p. 346). There are two main equity indices on the BVMT: The TUNINDEX that has been created in 1998 and lists 75 stocks (“BVMT”, 2017a) and the TUNINDEX20 consisting of the 20 largest companies of the Tunisian stock market (“BVMT”, 2017b). Unfortunately, the BVMT does not provide up-to-date market statistics so there is no metric available to determine the current capitalization of the Tunisian market.

The largest and oldest financial market in North Africa is the **Egyptian Exchange** (EGX), also known as the Cairo and Alexandria Stock Exchange (CASE). The first exchange in Alexandria was founded in 1883 and a second independent bourse in Cairo in 1903. Before the exchange folded up its operations in 1961 due to the government-sanctioned demise of the Egyptian private sector, the two trading facilities in Cairo and Alexandria had already merged to form the CASE and was listed as the fourth-largest stock exchange in the world. It opened its operations again in 1997 and since then has established itself as one of Africa’s most influential capital markets (Sieper, 2008, p. 330). As of today, the EGX has grown substantially to list 185 companies with a total market capitalization of 35 bn USD. The 30 largest listings are represented the exchange’s main equity index, the EGX30. The EGX is highly active in establishing partnerships with other exchanges to enhance their business. It currently has signed Memoranda of Understanding (MoU) with virtually all major stock exchanges in North Africa, the Middle East and the Mediterranean area (“EGX”, 2017) as well as various global exchanges such as Bolsa BM&F Bovespa in São Paulo or Shanghai Stock Exchange. The latest MoU of the EGX that was signed during the research of this paper was a partnership with the Sydney Stock Exchange in Australia in February 2017 with the purpose to exchange information, explore new business areas and trade or cross-list securities across both exchanges (“Arab Finance”, 2017). The latest Egyptian company to start the process of going public on the EGX is the Banque du Caire which plans to raise

³ The SME Market is a specialized segment for Small and Medium Enterprises.

a total capital of 2.25bn EGP⁴ through the issuance of 562.5m shares at 4 EGP/share (“Daily News Egypt”, 2017). As of the date of this paper, the Egyptian Exchange has approved the listing application of Banque du Caire, but the IPO has not been completed yet.

There are two more stock exchanges located in North Africa: the **Libyan Stock Market** in Tripolis and the **Khartoum Stock Exchange** in Khartoum (Sudan). Because up-to-date information is rarely available and the two markets do not play a significant role in Africa, we forgo a detailed description.

Table 2 presents a summary of the markets in North Africa with data as of March 2017 retrieved from the respective exchanges’ official websites:

Table 2: Summary of North African Markets / Statistics as of March 2017

#	Stock Exchange	Market Cap m\$	Listed Equities	Main Index	Index Level
1	Morocco	58,542	75	MASI	9,422.20
2	Egypt	35,753	185	EGX30	12,982.66
3	Tunisia	---	82	TUNIN- DEX	5,562.70
4	Bourse d’Algerie	412	5	---	---
5	Libyan Stock Market	---	---	---	---
6	Khartoum Stock Exchange	---	64	KSE Index	3,472.62
-	Total North Africa	ca. 94,707	ca. 411		

To illustrate the market movements in the North African capital markets, Figure 3 shows the 5Y performance of the major equity indices:

⁴ Approximately 122m USD at an FX rate of 1 EGP = 0.0544 USD (as of 06/Feb/2017).

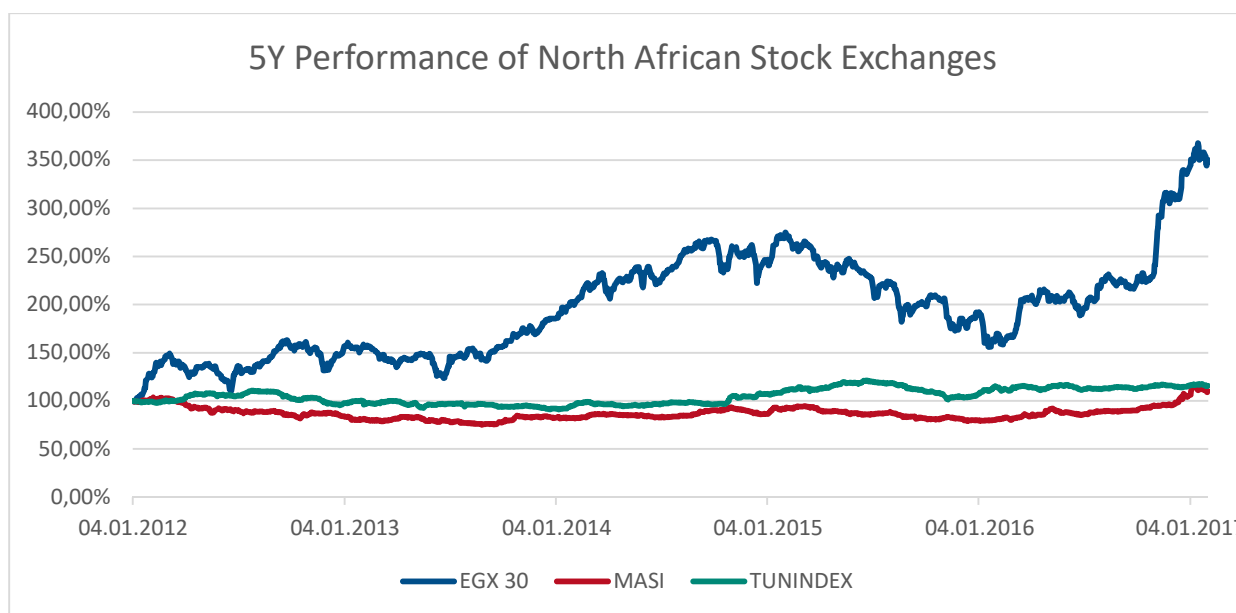


Figure 3: 5Y Equity Performance of North African Stock Markets

Figure 3 shows a flat curve for the Moroccan All Share Index (MASI) in Morocco and the TUNINDEX in Tunisia, indicating a low volatility for equity investments in those two markets. On the contrary, the EGX30 on the Egyptian Exchange experienced a comparatively high volatility with one large timespan of rising stock prices between 2014 and 2015, followed by a sharp decline. In late 2016 however, stock prices in Egypt jumped to an all-time high. Although various reasons account for this increase, the devaluation of the EGP and a stronger Egyptian economy following volatile years of uncertainty after the Arab Spring played a major factor in the development. Especially the Egyptian market shows a lot of IPO activity with the most recent listing initiations of Banque du Caire and MM Group.

3.2 West Africa

The financial markets of West Africa are determined mainly by three economies: Nigeria, Ghana and the Union Économique et Monétaire Ouest Africaine (UEMOA). One minor financial market in the region is located on the island nation of Cape Verde. Sierra Leone is a special case that will be examined briefly. A map of the West African markets can be gathered from Figure 4 (UEMOA countries in orange, single-country stock exchanges in green):

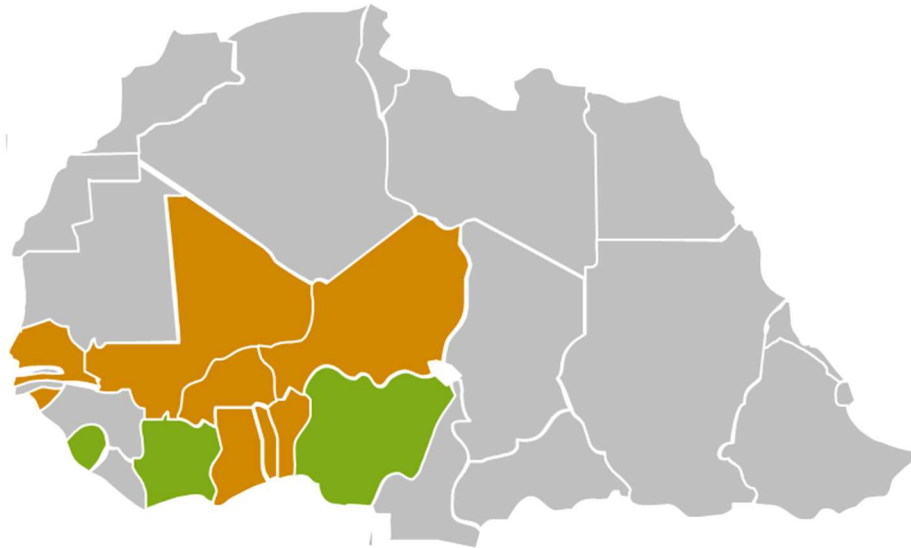


Figure 4: Map of West African Capital Markets

The four stock exchanges in West Africa are members of the **West African Capital Markets Integration Council (WACMIC)**, a supranational organization that was established as the governing body for the West African capital markets. It was installed in 2013 and aims to define a standardized regulatory environment as well as facilitate cross-border trading and listing for securities within the West African region.⁵

The financial market in Nigeria is organized on the **Nigerian Stock Exchange (NGSE)** in Lagos. The NGSE was established in 1960 and is the third largest African exchange behind the Egyptian Exchange and Johannesburg Securities Exchange (Sieper, 2008, p. 359). It provides access to the capital markets for the largest African economy and has an active market for stocks, bonds and also ETFs and REITs. As of now, the Nigerian Stock Exchange lists the shares of 176 companies, 64 bonds and 8 Exchange Traded Funds (“NGSE”, 2017a). With a current equity market cap of 28.6 bn USD, the NGSE is the largest stock exchange in West Africa.

The **Ghana Stock Exchange (GSE)** in Accra started operations in 1990, about 30 years after the NGSE in Lagos. The Ghana Stock Exchange is authorized for the trading of stocks, bonds and ETFs, with a total of 44 companies whose shares are currently traded on the GSE (“African Markets”, 2017a). Ghanaian government bonds comprise the majority of the issued debt securities. All products on the GSE are quoted in Ghanaian Cedi (GHS) and the main equity index is the GSE-Composite Index which represents the performance of all companies listed on the exchange.

The **Union Économique et Monétaire Ouest Africaine (UEMOA – West African Economic and Monetary Union (WAEMU))** is an organization of the eight West African countries Benin, Burkina Faso, Guinea-Bissau, Côte d’Ivoire, Mali, Niger, Senegal and Togo. The member states of the UEMOA form the currency zone for the West African CFA Franc (ISO Code: XOF) that has been established in 1945 in the former French colonies in West Africa.

⁵ For references, see “GSE” (2016), “BVC” (2016), “NGSE” (2016).

The countries pooled in the UEMOA bundle their market access through the **Bourse Régionale des Valeurs Mobilières** (BRVM) which is located in Abidjan (Côte d'Ivoire) and has replaced the former Abidjan Stock Exchange in 1998. It is one of two regional exchanges in Africa and has been established for the trading of stocks and bonds. As of now, there are 43 equity securities listed in the prime equity section of the BRVM in 7 different industry sectors ("African Markets", 2017b). The number of listed securities has grown from 38 securities back in 2008 (Sieper, 2008, p. 374). The performance of the listed companies is mirrored in the BRVM Composite Index, which has been performing strong in recent years and even claimed to be the best performing African stock market in 2015 with a 17.77% increase of the BRVM-CI under generally difficult economic conditions in Africa⁶ ("African Markets", 2016). Additionally, the BRVM10 Index comprises ten of the most actively traded securities of the BRVM. With an equity market capitalization of 12.5 bn USD, the BRVM is the second largest exchange in West Africa (for market statistics, see "BRVM", 2017).

The **Bolsa de Valores de Cabo Verde** (BVC) is the official trading facility of Cape Verde. The BVC is located in Praia and was established in 2005. Based on information provided by the ASEA as well as the exchange's website, there are currently four companies and 26 bonds listed on the BVC with a total market capitalization somewhere around 273 million USD ("ASEA", 2017e). Among the listed equities are two banks, the Banco de Cabo Verde and the Caixa Económica de Cabo Verde. The BVC maintains only a website in Portuguese and provides only few information on its listed companies, indicating a lag in development and openness to international investors as well as difficulties in retrieving reliable market data.

Table 3: Summary of West African Markets / Statistics as of March 2017

#	Stock Exchange	Market Cap m\$	Listed Equities	Main Index	Index Level
1	Nigeria Stock Exchange	28,632	176	NGSE ASI	25,406.72
2	BRVM	12,155	43	BRVM-C	279.32
3	Ghana Stock Exchange	11,331	44	GSE CI	1,895.54
4	Bolsa de Valores de Cabo Verde	---	4	---	---
5	Sierra Leone Stock Exchange	---	1	---	---
-	Total West Africa	52,118	268		

A special case is the capital market of Sierra Leone. In 2009, the **Sierra Leone Stock Exchange** officially opened for the trading of equities, commodities, bonds, forex and derivatives in Freetown ("ASEA", 2017c; "Bank of Sierra Leone", 2017). SLS is a member of the African Securities Exchange Association ("ASEA", 2017b). As of the year 2012, there was only one listed company on the stock exchange: the Rokel Commercial Bank. Trading is very illiquid and infrequent with trading hours of roughly an hour and a single digit number of trades per trading session (Manson, 2012). Table 3 offers a summary on the current market statistics of the West African capital market.

⁶ In 2015, Africa had only three positively performing stock markets: the BRVM, Botswana and South Africa in local currency and the BRVM was the only positive performer when converted to USD values.

Figure 5 illustrates the performance of the stock markets at the NGSE, BVRM and GSE for the past five years.

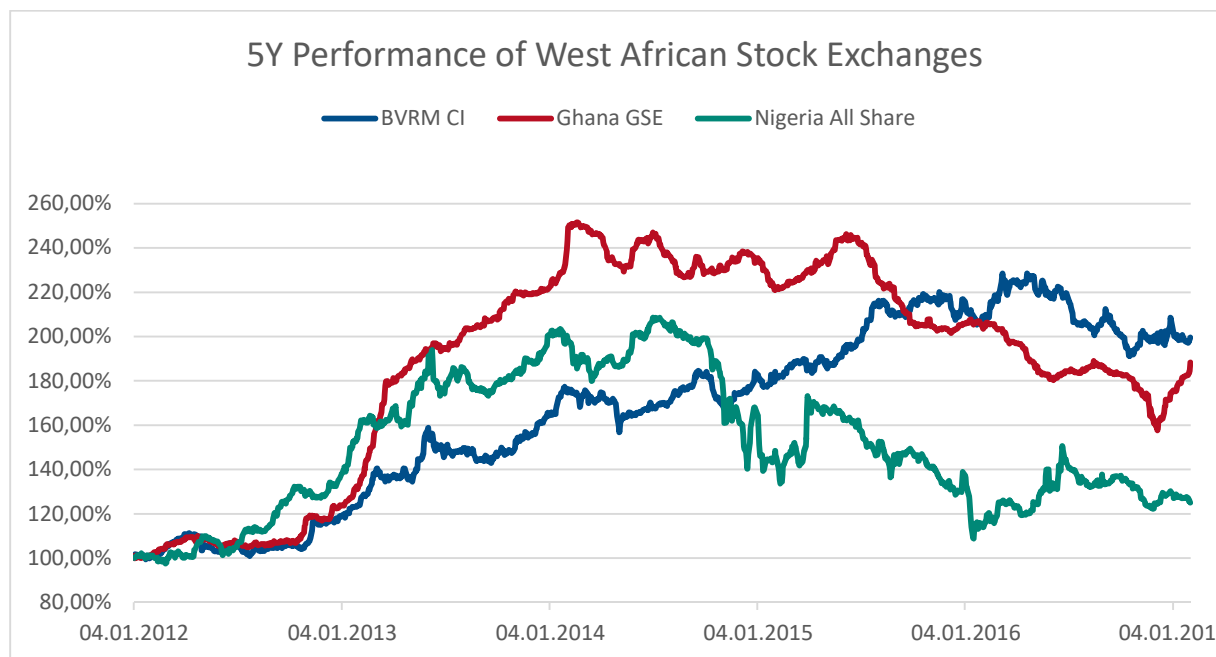


Figure 5: 5Y Equity Performance of West African Stock Markets

In comparison to the performance of North African stock exchanges the equity indices in West Africa show a lot more volatility during the timespan, which can be interpreted as an indicator for an ongoing lively trading in the stocks listed at these exchanges.

3.3 Sub-Saharan Africa

The most African economies are located south of the Sahara and therefore belong into this section. In order to give this part more structure, it will further be divided into four subsections: the Central African financial markets, markets in East Africa, the economies in the Southern part of Africa and the two remaining financial markets off the eastern coast of Africa in the Indian Ocean, namely the Seychelles and Mauritius.

3.3.1 Central African Region

The Central African region in terms of financial markets consists of Cameroon and the Communauté Économique et Monétaire de l'Afrique Centrale (CEMAC, Central African Economic and Monetary Union). Cameroon is part of the CEMAC but also maintains its own stock exchange in Douala. A map of the countries that are included in the markets of the Central African region is provided in Figure 6.

The two stock exchanges in Central African are of minor size and only play a subordinate role within African markets. The **Douala Stock Exchange (DSX)** is located in Cameroon's capital and serves as the main capital market access for the country. However, information is rarely available. The last statement on market movements on the exchange's website is dated 02/08/2013 as there is apparently very little to no active trading in the market. At that point in time, the exchange counted three listings

with a total market capitalization of 115 billion CFA Franc (approximately 178 million EUR) and based on these numbers is one of the smallest stock exchanges in Africa (“DSX”, 2017a; “DSX”, 2017b). The second exchange, covering the whole CEMAC region, is the **Bourse Régionale des Valeurs Mobilières d’Afrique Centrale** (BVMAC) which is located in Libreville (Gabon) and is Africa’s second regional bourse. The exchange was founded in 2003 with the purpose of developing the financial markets within the CEMAC region. It comprises the six countries Gabon, Chad, Central African Republic, Equatorial Guinea, Republic of Congo and Cameroon (“BVMAC”, 2017a). As of today, the exchange lists eight bonds and one equity security. This particular security is the company Siat Gabon (“CNBC Africa”, 2013). The stock exchange’s website still lists the security with the first quotation price of 28,500 CFA Franc and the bonds at par value (“BVMAC”, 2017b).



Figure 6: Map of Central African Capital Markets

In order to enhance the development of the Central African markets, the involved authorities are in discussions for a possible merger between the Douala Stock Exchange, which according to reports is becoming more precise and could generate up to 1 trillion CFA Franc (XAF) of new issues (“Financialafrik”, 2015 & 2017a).

3.3.2 East Africa

East Africa is classified here as the markets of Kenya, Tanzania, Uganda, Rwanda and Somalia where Kenya’s capital market maintains a clear dominance in the Eastern region of the continent. Figure 7 shows the regional map of East Africa’s markets.

The largest market in East Africa is the **Nairobi Securities Exchange** (NSE) that opened its business in 1954 in Nairobi (Kenya) with a long history as an established trading facility in Africa (“NSE”,

2017a). The exchange is one of the most developed stock exchanges in Africa and currently lists 65 companies with a total market capitalization of 1.861 trillion Kenyan Shilling (KES), which is equal to approximately 18 billion USD.⁷ The NSX also features a very active bond market. The main equity index is the NSE All Share Index that tracks all listed companies. It is complemented by a variety of additional indices such as the NSE 20 Share Index, FTSE NSE Kenya 15 Index and the FTSE NSE Govt. Bond Index among others (“NSE”, 2017d).

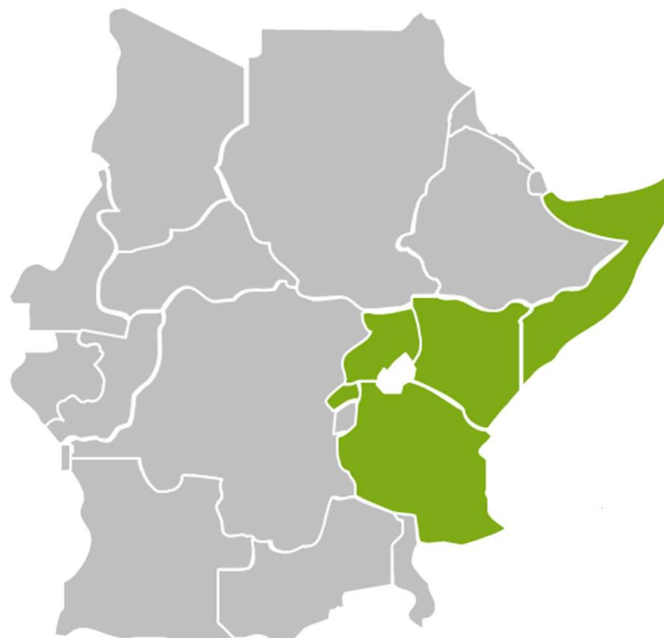


Figure 7: Map of East African Financial Markets

The second exchange in East Africa is the **Dar Es Salaam Stock Exchange (DSE)** in Tanzania. The institution is operating since 1996 with the purpose to be a sustainable exchange and an engine for growth in Tanzania’s markets. The exchange lists stocks of established companies as well as corporate and government bonds and in 2013 opened a segment for second tier companies called “Enterprise Growth Market” (“DSE”, 2017a). The equity section lists 18 domestic companies and 7 cross-listed securities with the majority being listed on the securities exchange in Nairobi as the primary market (“DSE”, 2017b). Since Tanzania and Kenya are direct neighbours, these double-listings enhance opportunities for large regional (mainly Kenyan) companies such as Kenya Airways Ltd or Kenya Commercial Bank Ltd. The total market capitalization on the exchange amounts to 19.837 trillion Tanzanian Shillings (TZN) or 8.87 bn USD and the overall market performance is tracked with two equity indices: The DSE All Share Index (DSEI) which is comprised of all listed companies and the Tanzania All Share Index (TSI) that excludes all cross-listed securities (“DSE”, 2017c). In July 2016, the Dar Es Salaam Stock Exchange became the third self-listed stock exchange in Africa, following Johannesburg and Nairobi.

The **Uganda Securities Exchange (USE)** was launched in Kampala in 1997 and was licensed in 1998 to operate as an approved stock exchange with an equity section and a bond market (“USE”, 2017a).

⁷ Market Cap as of 22/03/2017, published in “NSE” (2017d). FX Rate of the same day. For listed companies see “NSE” (2017b).

The exchange currently lists 16 equity securities of which half are domestic companies and the other half are cross-listed Kenyan companies⁸ similar to the Dar Es Salaam Stock Exchange. The market performance is tracked with two different equity indices, namely the USE All Share Index and the USE Local Company Index (USE LCI) that includes only domestic companies based in Uganda. With a current total market capitalization of 6 bn USD the stock exchange ranks third in East Africa.

One of the smallest stock exchange is organized on the **Rwanda Stock Exchange (RSE)** in Kigali. The institution was established in 2005 with the objective to carry out stock market operations but did not start operations until 2011 (“RSE”, 2017a). As of today, the RSE lists 8 companies in its equity section and 14 fixed income securities in the bond section (thereof 12 government and 2 corporate bonds) with a total market capitalization of 2.77 trillion Rwandan Franc or approximately 3.4 bn USD (“RSE”, 2017b). Most recently in March 2017, Rwandan-based company I&M Bank Rwanda made positive news as it completed a highly successful IPO. During the subscription period investors registered demand for 207 million shares against the offered 99 million by I&M Bank which resulted in a 209% oversubscription rate. The proceeds from the IPO are currently expected to be valued at \$10.8m (Esiara, 2017) which values I&M Bank Rwanda at a total \$50m given that the offer of 20% stake in the company.

Table 4: Summary of East African Markets / Statistics as of March 2017

#	Stock Exchange	Market Cap m\$	Listed Equities	Main Index	Index Level
1	Nairobi Securities Exchange (NSX)	18,495	65	NSE All Share	131.52
2	Dar Es Salaam Stock Exchange (DSE)	9,091	25	DSE All Share	2,326.62
3	Uganda Securities Exchange (USE)	5,711	16	USE All Share	1,508.45
4	Rwanda Stock Exchange (RSE)	3,343	8	RSE All Share	127.94
5	Somali Stock Exchange (SSE)	ca. 2.5 ⁹	2	---	---
-	Total East Africa	36,418	116	---	---

The smallest market in East Africa is the **Somali Stock Exchange** with its headquarters in Garowe (Somalia) and office locations in Mogadishu. It was initiated by the Somali Economic Forum with the basic principal of enhancing FDI’s in Somalia and began trading in 2015 (“SSE”, 2017a). Currently there are two listed companies in the equity section: Somali Postal Express, a logistics company and the Saanqaad group which is active in the agricultural business (“SSE”, 2017b). The exchange also provides platform to trade (Islamic) bonds (Sukuks) and commodities, which is mainly represented by

⁸ For reference on listed companies in Uganda, see “USE” (2017b).

⁹ The website of the SSE indicates that one company has issued 50,000 shares currently traded at \$49.75. For the second listed company there is no indication on the number of issued shares.

different kinds of livestock raised in Somalia (Sheep, Goat, Camel). The Somali Stock Exchange has signed a Memorandum of Understanding (MoU) with the Nairobi, which assists in the technical development. Table 4 summarizes the market highlights of the East African markets. All data was exclusively retrieved from the website of the stock exchanges as of March 28th 2017.

As shown within Table 4, the markets in East Africa are capitalized with a total volume of 36.4 billion USD and currently have 116 total companies listed on five stock exchanges. The respective equity index movements are shown in the following figure:

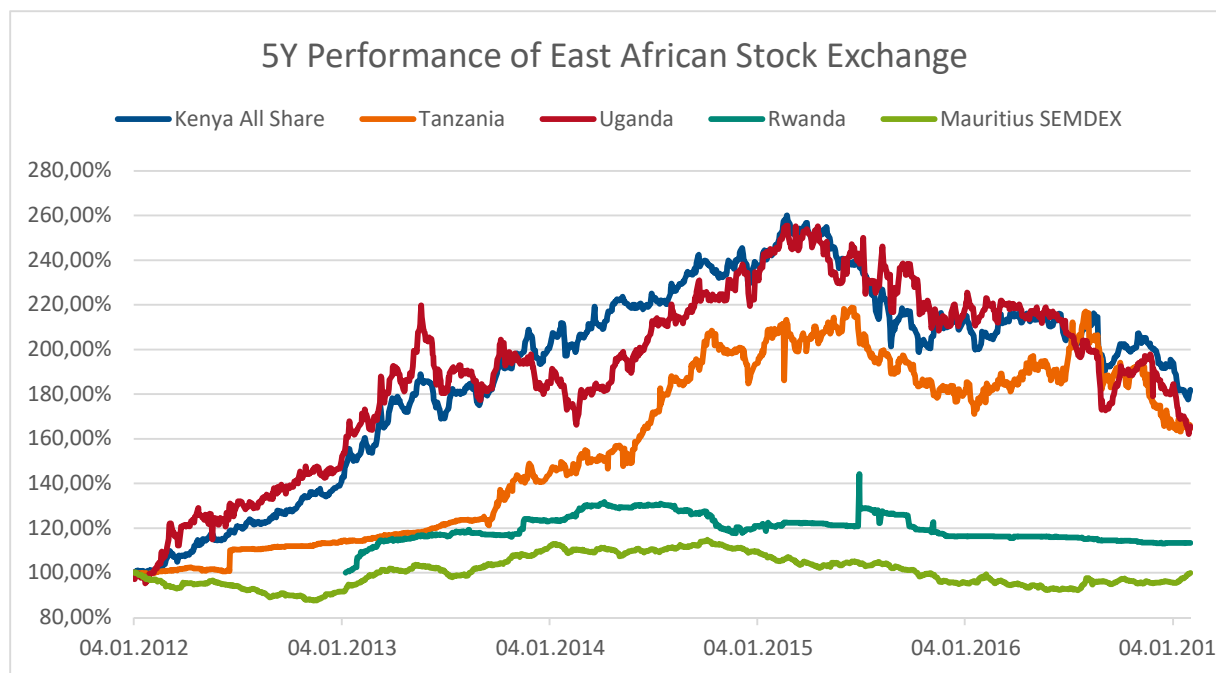


Figure 8: 5Y Equity Movements of East African Stock Markets

The largest equity markets of East Africa in Tanzania, Uganda and Kenya show similar movements with a strong increase that peaked in 2014 and a subsequent decrease to an index level of around 160% of the respective 2012 level.

3.3.3 Southern Africa

The Southern financial markets in Africa are heavily dominated by South Africa but have an increasing number of stable and growing economies with functioning access to the capital markets, such as Namibia, Botswana, Malawi, Zambia and Zimbabwe. Additionally, there are developing markets in Mozambique as well as in Swaziland and Lesotho and pending plans to establish a stock exchange in Angola. Figure 9 shows the economies with financial markets in the Southern African region.

All countries are members of the South African Development Community (“SADC”, 2017a). The financial markets of member countries are part of the Committee of SADC Stock Exchanges (CoSSE), that was established in 1997 as a collective body with the purpose to make security exchanges in the region more attractive for regional and international investors, to increase market liquidity in all investment products, to promote integration between member exchanges and to encourage a harmonized securities market environment within the SADC region (“ASEA”, 2017g).



Figure 1: Map of Southern African Financial Markets

The dominant African financial market is located in South Africa and is organized on the **Johannesburg Stock Exchange (JSE)**, the by far largest exchange on the African continent in terms of market capitalization. The JSE was formed in 1887 during the era of the first South African gold rush, making it the second oldest African exchange. In 2001, the JSE acquired the South African Futures Exchange (SAFEX) and in 2003 the AltX, an alternative exchange for the listing of small and mid-sized companies. The latest addition was the acquisition of the Bond Exchange of South Africa (BESA) in 2009. As of today, the Johannesburg Stock Exchange primarily serves five financial markets: equities, bonds as well as a very active derivative market for financials, commodities and interest rates. These traded derivatives on the JSE include futures and options on stocks and bonds as well as currency derivatives, forward rate agreements and swaps.

The equity section of the exchange is the largest in Africa with current listings of 383 companies on the main section and the AltX of the Johannesburg Stock Exchange (“JSE”, 2017c). A large equity market share in South Africa belongs to a few internationally quoted firms such as British American Tobacco, SAB Miller and BHP Biliton. The exchange provides a variety of South African equity indices which are issued through a joint venture between the JSE Limited and the British FTSE Group. The whole FTSE/JSE-Africa Index Series is headlined by the FTSE/JSE All-Share Index which covers all listed equity securities and is complemented by a variety of other main indices, such as the FTSE/JSE Top 40 Index as well as a Mid Cap, Small Cap, Growth and Value Index. Additionally, the FTSE/JSE joint venture publishes sector-specific indices such as the FTSE/JSE Gold Mining Index or the FTSE/JSE Industrials 25 Index. Many listings, especially companies who are active in the gold

mining industry, maintain a secondary listing on another international exchange such as the London Stock Exchange (Sieper, 2008, p. 318-320).

The South African equity market has a clear dominance among all markets in Africa with a current market capitalization of 1.038 trillion USD or 13.488 trillion ZAR, a market size that also is competitive among the leading stock exchanges in the world. The development of the market cap on the JSE is shown in Figure 10 (source: own graphic based on “JSE” (2017b)):

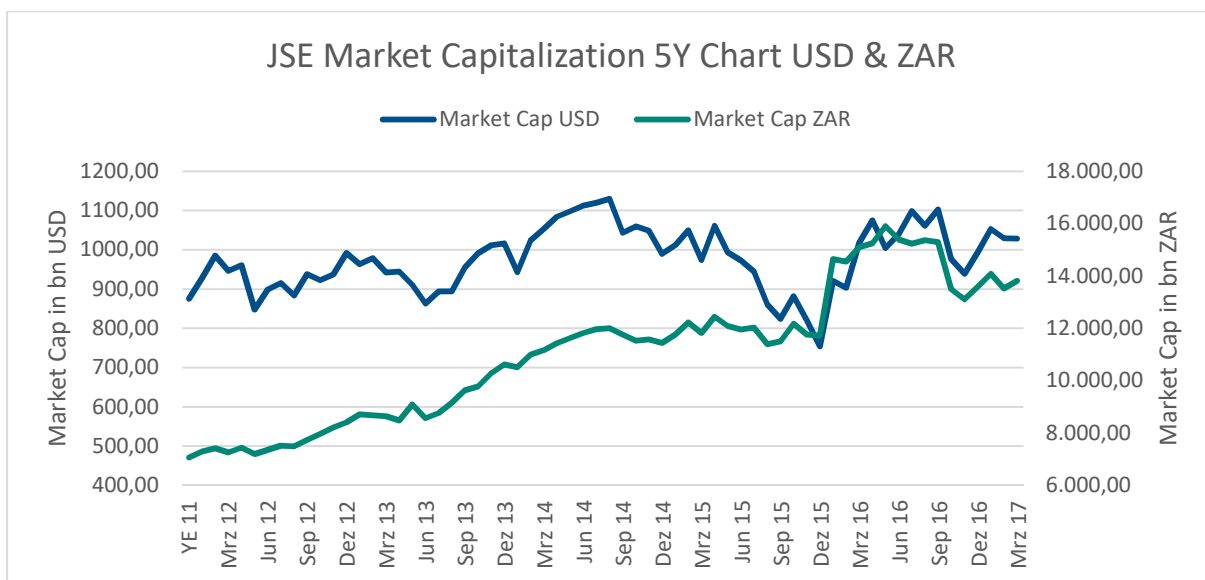


Figure 20: JSE Market Capitalization

The JSE market cap has continuously increased in local currency (ZAR; green line and right vertical axis) from 8,000 bn at YE 2011 to 12,000 bn at YE 2015 and then even jumped to peak at a market cap of approximately 16,000 bn ZAR in early 2016. Since then, the market has slightly declined and has currently settled down at around 14,000 bn ZAR. In USD-terms, the increase has been less steep but more volatile, which is mainly determined by a depreciating local currency against the USD.

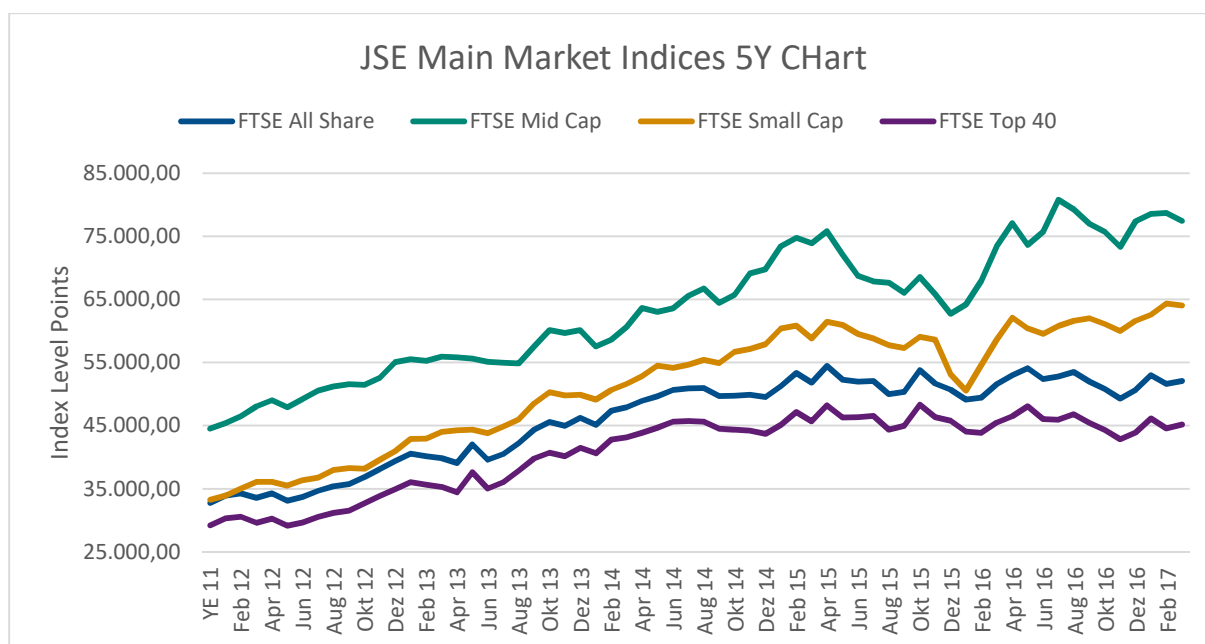


Figure 31: Performance of FTSE/JSE Market Indices

The main index on the JSE, the FTSE All Share Index, increased from 35,000 to a current level of 50,000 points (+42%) while the FTSE Top 40 Performance is quite similar. The Mid Cap and Small Cap indices in South Africa showed an even higher increase in the observation period.

After the South African market, the runner up in importance in Southern Africa is the financial market in Namibia, organized on the **Namibian Stock Exchange (NSX)**. The first Namibian Stock exchange was founded in 1904 under the German colonial rule due to the diamond rush but closed its operations six years later in 1910. In 1992, the Namibian Stock Exchanges officially launched its operations in Windhoek with one dual listed company and one stockbroker. In 2012, the Vancouver-based B2gold company became the first company to issue a Namibian Depositary Receipt on the NSX. As of today, the Namibian Stock Exchange lists 39 companies with a market cap of 97 bn USD and the performance of the capital market is mirrored in the NSX Overall Index. The Namibian Stock Exchange is in a good position to become one of the most impactful exchanges in Africa although it is dominated by companies with a dual listing.

Three years after the foundation of the Namibian Stock Exchange, Botswana started operating its own exchange in Gaborone in 1995, the **Botswana Stock Exchange (BSE)**. The exchange was formerly established in 1989 as the Botswana Share Market, an informal market with only five listings and one brokerage firm (“ASEA”, 2017f). In order to facilitate and encourage foreign investments in the country, a committee was formed in 1990 and the legislation to establish a public stock exchange passed through the parliament in 1994, paving way for the Botswana Stock Exchange where trading opened in November 1995. As of today, there are 34 companies listed on the BSE. Performance is tracked in three different indexes: the BSE Domestic Company Index (BSE DCI) representing the performance of Botswanan companies, the BSE Foreign Company Index (BSE FCI) for foreign companies with a secondary listing in Botswana, and the BSE All Company Index (BSE ACI), which is the weighted

average of the DCI and FCI Index, mirroring the performance of all the listed companies on the Botswana Stock Exchange. According to the exchange's website, the total market capitalization of Botswana's whole equity market was 56.143 billion USD in 2009¹⁰, where domestic companies account for only 4.277 billion USD market cap or 7.6% of the market. The remaining 51.865 billion USD belong to foreign companies listed on the BSE. However, the exchange has dedicated its mission to be the leading African exchange by continuously enhancing the number of listings, market capitalization and liquidity and to provide and operate a fair and transparent stock market for all domestic and foreign stakeholders ("BSE", 2017a). Next to equity securities, the exchange has an increasing fixed income market with both, government and corporate bonds listed and traded.

The **Lusaka Securities Exchange Plc** (LuSE) in Zambia's capital city was established in 1993 (roughly at the same time as the NSX and BSE) through a joint collaborative effort of the World Bank and the International Finance Corporation and opened its business in 1994 ("LuSE", 2017a). As of today, the Lusaka Securities Exchange lists 23 companies who are all included in the LuSE All Share Index. The index currently represents a total market cap of the Zambian equity market of approximately 5.75 billion USD¹¹, a large increase from 17 listings with roughly 4 billion USD market cap nine years ago (Sieper, 2008, p. 425). However, the exchange is heavily dominated by the (dual) listing of Shoprite Holdings, a Zambian subsidiary of the South African retail company, which accounts for approximately 3.5 billion USD or 60% of Zambia's total market cap.

The first stock exchange in Zimbabwe was already found back in 1896 but today's **Zimbabwe Stock Exchange** (ZSE) was established after World War II in Bulawayo (1946) and Harare (1951), which later determined to be the headquarter ("ZSE", 2017a). As of today, the Zimbabwe Stock Exchange lists 63 companies and tracks performance in two market indices: the ZSE Industrial Index and the ZSE Mining Index ("ZSE", 2017b). The economy of Zimbabwe dollarized its currency in 2009 and the ZSE subsequently adopted the US Dollar as the primary trading currency. Both indices were rebased to 100. The official website of the ZSE does not publish up-to-date values for market capitalization; one of the latest indicators is a total market cap of 3.4 bn USD as of September 2015, which shed by nearly 2 bn USD since its peak ("Zimbabwe Independent", 2015).

The **Malawi Stock Exchange** (MSE) started its trading activities in Blantyre in 1996 ("MSE", 2017a). The exchange offers three segments for companies to list in: the Main Board, Alternative Capital Market and Debt Market. As of today, the MSE lists 13 companies on the Main Board and one government bond on its debt capital segment.¹² No companies are listed in the alternative market segment yet. With a capitalization of 13 bn USD, the MSE is of medium-size in the Southern part of Africa.

The remaining three markets in the southern region of Africa are of comparatively subordinate importance. The **Swaziland Stock Exchange** was introduced in Mbabane in 1990 as an OTC stock-broker facility and was inaugurated as an official stock exchange nine years later. It currently lists the shares of six companies and five government and corporate bonds ("SSX", 2017). The **Maseru Securities Market** is one of the newest exchanges and was launched in January 2016 by the Central Bank

¹⁰ Unfortunately, the statistics on the BSE's webpage have not been updated with more up-to-date market data. For reference, see "BSE" (2017b). Newer market data up to 2013 can be found in the ACM Insights.

¹¹ Market cap as of 27/01/2017 provided on <http://www.luse.co.zm>, Retrieved 2017-01-29.

¹² For information on the Main Board, see "MSE" (2017b). For information on the Debt Market, see "MSE" (2017c).

of Lesotho. It's a non-profit organization established to help facilitate the centralized trading of securities in the country and part of wider capital market reforms in Lesotho. As of today, there are five listed bonds and a couple of treasury bills on the exchange but no equity securities yet ("MSM" 2017a; "MSM" 2017b; "MSM" 2017c). The **Bolsa de Valores de Moçambique** (BVM) is sometimes referred to as Maputo Stock Exchange. The stock exchange was introduced in 1999 with the support of the World Bank and the Lisbon Stock Exchange and currently lists four equity securities and two commercial papers with a total market capitalization of 936 million USD.¹³ Just like the Bolsa de Valores de Cabo Verde, the BVM is also heavily focused on the Portuguese speaking world as they provide virtually all their information in Portuguese language only.

Angola's plans to introduce a stock exchange have been pending for almost a decade. Laxmidas (2013) reported that Angola has approved regulatory laws that pave the way to open a Luanda-based bourse for the national stock and debt market. McClelland and Soque (2014) reported on Bloomberg that Angola has delayed the opening of its stock market to 2017, primarily to give local companies time to improve their accounting records and to meet regulatory requirements. Table 5 provides a summary of the market statistics of the exchanges in Southern Africa with data as of March 2017:

Table 5 Summary of Southern African Markets / Statistics as of March 2017

#	Stock Exchange	Market Cap m\$	Listed Equities	Main Index	Index Level
1	Johannesburg Stock Exchange	1,038,576	≈ 400	JSE ASI	51,724.92
2	Namibian Stock Exchange	97,534	39	NSX Overall	1,095.71
3	Botswana Stock Exchange	18,658	26	DCI	9,199.89
4	Malawi Stock Exchange	13,344	13	MASI	14,602.22
5	Lusaka Stock Exchange	11,247	22	LASI	4,414.49
6	Zimbabwe Stock Exchange	3,850	63	INDUS- TRIAL	138.47
7	Bolsa de Valores de Mozambique	936	4	---	---
8	Swaziland Stock Exchange	251	7	SSX ASI	383.38
-	Total Southern Africa	1,184,145	≈ 570		

Figure 12 especially illustrates the extremely high volatility of the market in Zimbabwe and the severe drop in market capitalization in Zambia.

¹³ Market capitalization as of March, 24, 2017, for reference see "BVM" (2017a) and "BVM" (2017b).

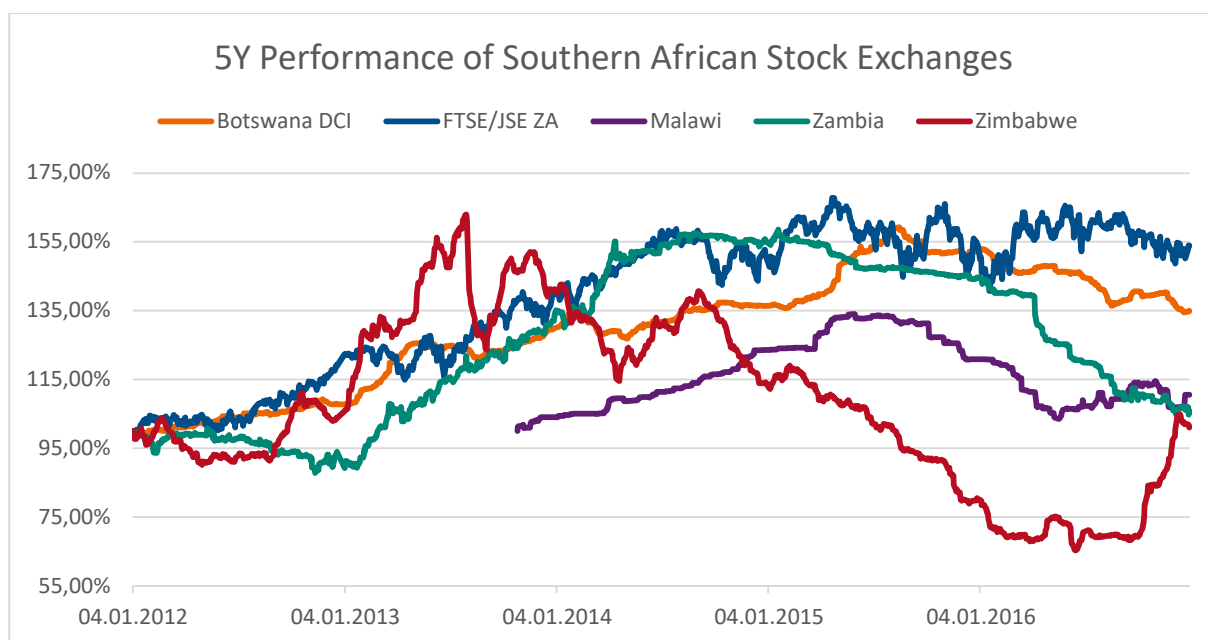


Figure 42: 5Y Equity Movements of Southern African Stock Exchanges

3.3.4 Indian Ocean

There are two more African securities exchanges left, namely the two island nations of Mauritius and Seychelles, located off the Eastern coast of Africa in the Indian Ocean. Technically, these countries could have been included in the section on East Africa, but in order to emphasize their independence from other East African markets, these two will be presented in a standalone section.

The more important market in the Indian Ocean is the market in Mauritius, which is organized on the **Stock Exchange of Mauritius (SEM)**. The institution has been established in 1988 and is located in Port Louis. The SEM's equity market is organized in two segments. The first one is the Official Market for more established companies. As of today, the Official Market lists 43 equity securities, five corporate bonds and ETF's each as well as a 28 investment funds. These numbers have all increased drastically during the last decade.¹⁴ The most important index is the SEMDEX, which is a weighted index of the market capitalization of all listed equities in the so-called "Official Market" segment. Other SEM indices are the SEM-ASI, SEMTRI, SEMTRI-ASI, SEMSI and SEM10.¹⁵ The second segment on the SEM is the Development and Enterprise Market (DEM) for small- and medium-sized enterprises. It currently lists 49 equity securities and has two indices: the DEMEX, which is the weighted index based on market capitalization and the DEMTRI, which is the total return index for the Development and Enterprise Market on the SEM. The "Official Market" has a current market capitalization of 10.5 bn USD while the DEM segment is capitalized with 1.39 bn USD as of April 2017. Because of the island's location in the Indian Ocean in between Africa and Central Asia, the Mauritian economy is eager to also expand its integration to the Asian continent. In 2016 for example, the Stock Exchange of Mauritius has signed a Memorandum of Understanding with the Bombay Stock Exchange in India

¹⁴ In 2008, the Official Market listed 7 equity securities and 11 investment funds according to Sieper (2008, p. 420).

¹⁵ SEM-ASI = SEM All Share Index; SEMTRI = SEM Total Return Index; SEM10 = 10 Equities with highest market capitalization on the SEM; SEMSI = SEM Sustainability Index.

to identify areas for future collaboration between the two exchanges in the areas of investment products, trading platforms and security (“BSE Media Release”, 2016).

The second exchange is the **Trop-X Seychelles Securities Exchange** which is a privately-owned company that was inaugurated in the Seychelles in late 2012. Trop-X received a license to establish and operate an organized exchange by the Seychelles Financial Services Authority (FSA) and nowadays manages platforms for the listing and trading of equities, derivatives, foreign exchange and bonds. As of January 2017, there are nine equity securities and two treasury bills traded on the Trop-X SSE (“Trop-X”, 2017) with a market capitalization of 40.7 million USD (“SSEI”, 2017).

4 Summarizing Statistics

After the comprehensive qualitative overview on the current African stock exchanges and financial markets as well as their history, we provide in a next step more quantitative insights into the African markets with respect to size and volume. Table 6 therefore summarizes the largest African capital markets in descending order based on their market capitalization in billion USD as of different years between 2011 and 2017. As of March 2017, Africa’s total market capitalization amounts to approximately 1.37 trillion USD of which South Africa alone accounts for over 1 trillion USD. The next two largest markets by capitalization as of 2017 are the Namibian and the Moroccan capital market with 97.5 and 58.5 bn USD respectively.

Overall, there is an increase in capitalization since 2011 with most markets reaching a peak around the year 2013. Since then, markets have dropped as indicated in 2015 with only 1.1 trillion USD, but have bounced back and increased by overall 200 bn USD to the current level. From a global perspective, even at the peak in 2013 the total market capitalization of Africa accounted for just 2.5% of the world’s total market capitalization of roughly 60.125 trillion USD as of data provided by the World Bank.¹⁶

The dollarized market capitalization of most African markets has declined between 2013 and 2015. There are two important drivers behind this downturn. First, a decline in actual stock prices in the markets, which lead to a strong decrease in the total market capitalization. Second, many African currencies strongly depreciated against the US Dollar, which lead to negative effects when converting the market’s capitalization from the local currency into USD.

¹⁶ See “Market Capitalization of listed domestic companies” (“World Bank”, 2017)

Table 6: Africa's Total Market Capitalization by Economy¹⁷

#	Economy	Region	2011	2012	2013	2015 ¹⁸	2017 ¹⁹	% of Total ²⁰
1	South Africa	South	845.6	998.3	970.5	735.9	1,038.6	63.92 %
2	Namibia	South	137.9	144.2	136.9	88.9	97.5	9.02 %
3	Nigeria	West	43.1	57.8	82.8	49.9	28.6	7.52 %
4	Morocco	North	60.2	52.8	54.8	45.9	58.5	3.61 %
5	Egypt	North	51.7	60.1	54.3	55.2	35.7	3.58 %
6	Botswana	South	54.7	53.0	54.1	46 ²¹	18.6	3.56 %
7	Ghana	West	28.5	30.5	28.2	18.9	11.3	1.86 %
8	Kenya	East	10.3	15.9	20.6	25.0	18.5	1.36 %
9	Tanzania	East	7.4	8.4	14.8	9.5	9.0	0.97 %
10	Malawi	East	16.4	10.6	13.0	11.3	13.3	0.86 %
11	BRVM	West	7.0	8.1	10.5	15.0	12.1	0.69 %
12	Zambia	South	9.4	9.4	10.2	5.8	11.2	0.67 %
13	Mauritius	Indian Oc.	7.7	7.1	8.5	7.2	10.5	0.56 %
14	Tunisia	North	9.6	8.9	8.5	---	---	0.56 %
15	Uganda	East	4.1	5.9	8.3	9.6	5.7	0.55 %
16	Zimbabwe	South	3.7	4.0	5.4	2.7	3.8	0.36 %
17	Other	Multiple	5.7	5.3	5.6	---	---	0.37 %
--	Total	All Africa	1,303.00	1,480.30	1,518.40	1,126.80	1,372.90	100.00 %
-								

Figure 13 illustrates the stock market performance of leading African stock exchanges calculated in different currencies to illustrate the performance dependencies on exchange rate hedging.

¹⁷ Sources: ACM Insight Report for the years 2011 through 2013; own research for the year 2015 and 2017. Exchanges with a market cap of less than 1 billion USD in the year 2013 but reliable market data are summarized under "Other Economies", namely Cabo Verde, Cameroon, Sudan, Mozambique and Rwanda. The sample excludes Algeria, BVMAC, Lesotho, Libya, Seychelles, Somalia, Swaziland and Uganda ALTX since the market data is either unreliable or the exchange was founded later than the year 2011.

¹⁸ Own Research for 2015 market capitalization based on the following sources: data for South Africa, Nigeria, Morocco, Egypt, Mauritius is provided by the World Federation of Exchanges; Botswana, Kenya, Ghana, Uganda by "Barclays" (2015); the NSX provided the data for Namibia directly to the author upon request; Zambia and Tanzania on the respective exchange's website; Zimbabwe's data is provided in "Reuters Africa" (2016); BVRM data in the "WSJ" (Johnson, 2016).

¹⁹ 2017 data for market caps is researched on the official websites of the stock exchanges as of March 2017.

²⁰ Proportion of Africa's market cap based on the data in the 2013 column.

²¹ The original source listed a market cap of 4.6 bn USD for domestic companies in Botswana. As the portion of domestic listings historically accounts for approx. 10% of total market, the number was multiplied by 10 for statistical purposes.

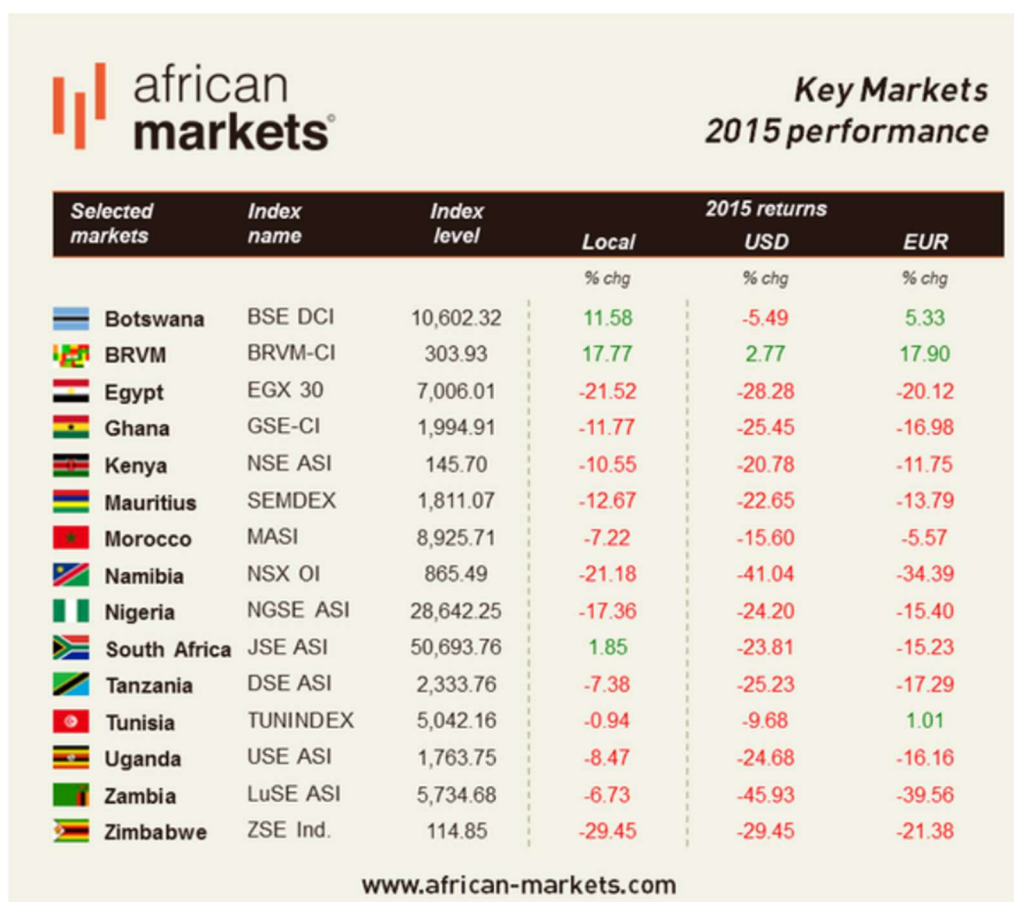


Figure 53: Performance of Key African Stock Markets in Different Currencies

The returns in South Africa in 2015 actually increased at 1.85% in local currency (ZAR), while at the same time they declined -23.81% in USD terms. This pattern holds for almost every market in Africa with very extreme cases observable in Botswana, Zambia, Tanzania and Uganda.

The final part of this market review of Africa's markets is dedicated to present an overview on the most important Pan-African Equity Indices. In previous sections, all stock exchanges and stock indices only represent the markets of a single African country. Besides that, a number of indices exists that cover an extended region of the African market landscape, ranging from taking only the Arab African states into account up to the continent as a whole. These indices are usually launched and maintained from major providers such as MSCI or FTSE and can, among various other purposes, for example serve as a benchmark index for the launch of Africa-based ETFs or similar investment products. The equity indices that are covered in this section are the MSCI EFM Africa²², MSCI EFM Africa ex South Africa, FTSE Pan-African Index and MSCI Arabian Markets (ex SA).

The **MSCI Emerging Frontier Markets Africa Index** captures large cap and mid cap equities across 2 Emerging Markets and 13 Frontier Markets across Africa²³ which effectively includes the stock exchanges in Johannesburg (JSE), Casablanca (CSE), Cairo & Alexandria (EGX), Abidjan (BVRM),

²² EFM = Emerging Frontier Markets.

²³ The 2 Emerging Markets are South Africa and Egypt; the 13 Frontier Markets are Burkina Faso, Benin, Guinea-Bissau, Côte d'Ivoire, Mali, Mauritius, Morocco, Niger, Nigeria, Senegal, Togo, Tunisia.

Mauritius (SEM), Lagos (NGSE) and Tunis (BVMT). The index consists of 93 individual securities that cover approximately 85% of the free-float adjusted market capitalization in each country. The index is heavily dominated by South African constituents with over 90% indexweight. The allocation of the index across the continent is provided in the following picture:

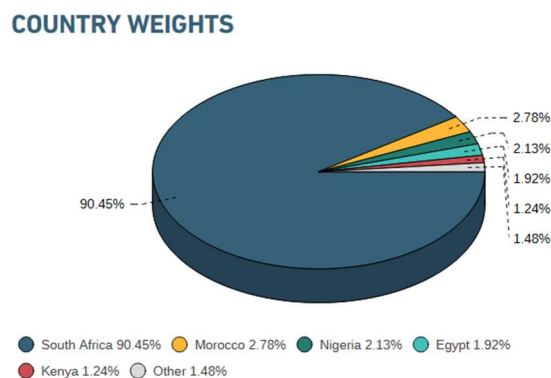


Figure 6: Country weights of the MSCI EFM Africa Index

The MSCI EFM Africa is the broadest index available to cover Africa’s financial markets and the best to reflect the actual capitalization of the African markets (although some for African standards medium-sized markets such as Namibia, Botswana or Kenya are missing). A detailed factsheet on the index can be found in “MSCI” (2017a).

A slightly adjusted version of the index is the **MSCI Emerging Frontier Markets ex South Africa Index** that removes the South African market from the previously presented index to provide a less ZA-centered African equity index. The composition includes 39 equity securities from 1 Emerging Market and 13 Frontier Markets, hence the previously presented MSCI EFM Africa Index less the South African constituents. As a result, the country weights shift accordingly. Morocco becomes the largest contributor with 29%, followed by Nigeria with 22% and Egypt with 20%. The allocation of country weights can be found alongside other information in the factsheet (“MSCI”, 2017b).

A comparable multi-country equity index from a different provider is the **FTSE ASEA Pan Africa Index ex South Africa**. The index is eligible to include up to 30 constituents from each ASEA member exchanges and excludes all South African equities because of it’s market dominance and because it would breach the index rule of capping each country weight at a maximum of 20%. The main purpose of the index is its use as a benchmark market model as well as serving as a basis for derivatives and index tracking funds such as ETFs. The largest portion of the index is allocated to Morocco and Egypt, followed by Nigeria and Kenya. Full details about country weights and methodology can be found in the factsheet (“FTSE”, 2017).

The **MSCI Arabian Markets ex Saudi Arabia Index** is not directly focused on Africa but on securities within the Middle East & North Africa (MENA) region. The index consists of 65 individual securities across 10 different Arabian financial markets. Three of them, namely Egypt, Morocco and Tunisia, are located on the African continent. The remaining seven are Bahrain, Kuwait, Jordan, Lebanon, Oman,

Qatar and the United Arab Emirates. The index weight of the country is presented in the following image and can be found in the factsheet (“MSCI”, 2017c):

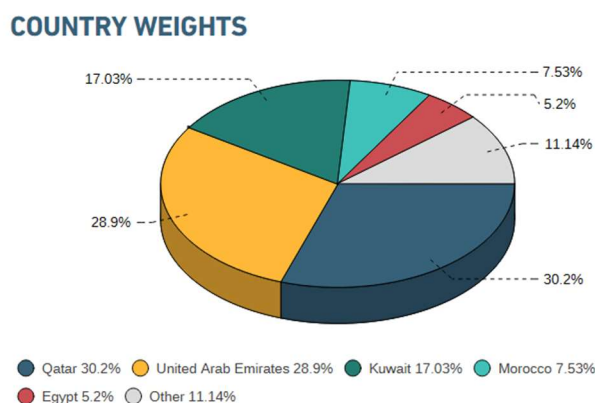


Figure 7: Country weights of the MSCI Arabian Markets ex Saudi Arabia

The index excludes Saudi Arabia as its financial market has a clear dominance among countries in the MENA region (similar to the case of South Africa). Technically, the index is an adjusted version of the MSCI Arabian Markets Index that includes Saudi Arabia as the eleventh and most dominant market in the MENA region.

These indices and derivative products based on these indices allow Investors to participate from the performance of African capital markets. However, investors have to be aware that the Johannesburg Stock Exchange dominates the continent, and to avoid a high idiosyncratic risk of the South African economy products excluding South Africa might be better diversified.

5 Conclusion

Despite the growing attention the African continent is attracting, the institutional knowledge about the investment potentials in African markets is surprisingly low. This evidence resonates with the fact that Western investors are very cautious with respect to an engagement in Africa; this is different for Chinese investors. Their behavior reflects both a geopolitical interest and the great potential in Africa. Given that mature capital markets in Western economies suffer from a significant drop in listed companies for two decades it seems evident that Western researchers, policymakers and investors shift focus and analyse African capital markets in detail.

Our study is an attempt to pave the ground for further research as well as practical action by providing evidence for stock exchanges on the African continent where the number of listings is increasing and the importance of stock exchanges for equity issues is growing. The capital markets, however, are dominated by a very few large stock exchanges while most of the markets are small and underdeveloped based on international standards.

That said there is the need to analyse the potential of African markets to attract smaller investments and thus not only contribute to a positive development on the continent but also provide attractive

investment opportunities for Western investors who are faced with a delining set of opportunities at home.

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