

For decades, the IMF has actively supported African financial markets with both financial and technical assistance. Much data and structural information have thus been collected through their Financial Sector Assessment Programme (FSAP). In order to further improve understanding of financial sectors, the IMF will dedicate greater attention to research. Scott Standley identifies the different determinants of financial market development, identifying market integration initiatives as essential.

Scott Standley

International Monetary Fund

Scott Standley is a Senior Research Officer in the Independent Evaluation Office of the International Monetary Fund. He was previously a researcher at the Center for Global Development, where he worked on private sector and financial market development in Sub-Saharan Africa. He holds a Master's in Public Policy from Harvard University's Kennedy School of Government and a B.A. in Economics from the University of Pennsylvania.

What Are the Determinants of Financial Market Development in Sub-Saharan Africa?

Sub-Saharan Africa's financial markets are generally immature and are widely characterized by their low level of activity and the domination of the banking sector. However, if a market and its economy have proportional sizes, it is possible to go beyond the constraints of scale by promoting regional integration. Here again, nothing is simple and it would certainly seem necessary to go slowly. Immediate reforms can however be envisaged, first by improving banking services and implementing stronger legal and regulatory structures.

By Scott Standley, Senior Research Officer at the Independent Evaluation Office of the International Monetary Fund¹

The benefits of deep financial markets have been extensively documented. Efficient, well-regulated markets mobilise capital and channel resources into productive investments. They also help better manage and diversify risk, mobilise savings and monitor the corporate sector. With this in mind, increasing attention has been paid to developing and deepening financial markets in many Sub-Saharan African countries over the last decade. National development strategies have included plans to create new markets or augment existing ones, and both multilateral and bilateral donors have supported such efforts.

Despite these trends, most financial markets in Sub-Saharan Africa remain underdeveloped and are not yet effective tools for improving economic prospects. The character of each domestic financial sector – and indeed all aspects of each economy – varies across countries, but many have immature domestic capital markets and rely on relatively shallow banking sectors. Outside of South Africa, equity markets in Sub-Saharan Africa are small and illiquid, and few countries operate viable domestic bond markets.

However, according to a large number of studies, the low development level of financial markets is not surprising. Increasing evidence suggests that the size of a financial market is related to the size of its economy. Given the small size of the majority of Sub-Saharan African economies, efforts to further integrate capital markets, in particular by promoting cross-border listings and sharing of technologies, are relevant, in addition to reforms to improve the efficiency of the banking sector and the legal and regulatory environments.

African financial sector: dominant banking sectors and immature financial markets

Banks still dominate the financial systems of most African countries, as few operate efficient capital markets and most tend to rely primarily on commercial banks for finance. The banking sectors of most African countries, however, do not yet have sufficient depth to play a catalytic role in promoting the development of a deep financial sector. Most standard indicators of banking sector depth are low compared to the rest of the world: credit to the private sector is limited, assets are highly concentrated in a small number of banks, and the total volume of assets is low (Table 1). Legal and regulatory structures have also been insufficient in many countries, with property rights poorly defined, contract enforcement weak and creditor protection deficient.

Most Sub-Saharan African countries, meanwhile, do not yet operate a viable stock market. Although there are at least 18 stock exchanges in the region², several of these have been largely inactive while others have grown considerably over the past decade – at least until the onset of the global financial crisis. With few exceptions, however, these markets can be described as having few company listings, low market capitalisation and low liquidity (Table 2). The Johannesburg Stock Exchange (JSE) in South Africa is the obvious exception, and in 2008, the JSE accounted for nearly 85% of Africa's total market capitalisation. Although the size of the other African exchanges varies, in general they are small relative to markets in the rest of the world. As an illustration, the total market capitalisation of all Sub-Saharan exchanges, excluding South Africa, was USD 90 billion at the end of 2008 – less than the size of ...

¹ The views expressed in this article are those of the author and should not be attributed to the IMF, its Executive Board or its management.

² Including the regional Bourse Régionale des Valeurs Mobilières (BRVM) based in Cote d'Ivoire that lists companies from eight west-African countries.

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... the Thai exchange (Table 2). Most African exchanges are also relatively illiquid compared to those in other regions; Sub-Saharan exchanges had an average turnover ratio of 10% in 2008 compared to 50% in emerging Asian economies. Such low levels of activity make it difficult to attract the volume of participation necessary to enlarge and deepen markets. Whereas efforts have been made by many exchanges to update their market infrastructures³ (seen as an obstacle to their expansion), the actual number of trades is still very low. While there are several million trades each year in larger emerging markets such as Brazil, there are fewer than 100 in some larger African exchanges.

If Sub-Saharan African equity markets remain underdeveloped, domestic bond markets are even more so. Few countries in Sub-Saharan Africa have a mature domestic bond market, and existing ones are shallow and inefficient. This can be partly explained by the fact that during the last two decades many African countries relied on easy access to concessional finance – access which impeded the development of domestic bond markets and led to debt profiles dominated by foreign currency. To date, African domestic bond markets are mostly not major channels of capital, as issues are few and erratic and most have short-term maturities of less than a year (Blommestein and Horman, 2007). These characteristics have constrained the establishment of reliable yield curves and pricing benchmarks, and have also limited growth of the investor base.

Determinants of financial market development

Developing efficient financial markets is not a short-term project. Much of the evidence suggests that the main drivers of financial market depth are the policy and institutional environments in which these markets operate – a finding that does not lend itself to quick fixes to prop up markets. Achieving deep and efficient financial markets will likely be difficult in the absence of corresponding policies that promote economic stability and stimulate investor confidence.

While transparent macroeconomic management and general political stability is necessary to attract investment, some specific reforms can be undertaken in the medium term. The legal and regulatory frameworks underpinning the financial system, for example, have consistently been shown to influence the depth of financial markets. To date, both banking sector and capital market development have been constrained by relatively

weak regimes. Stronger legal structures and regulatory bodies to better define property rights, enforce contracts and protect investors are needed before financial systems can operate effectively.

The sequencing of reforms is also important, and a strategy may start with initiatives to improve the efficiency of banking services, given evidence that countries with well-developed capital markets also generally have deep banking sectors (Andrianaivo and Yartey, 2009). Financial institutions and markets may grow simultaneously, but a focus on developing capital markets may be premature in countries lacking a sufficiently deep banking sector and adequate demand from firms for alternative financing instruments. An initial focus on improving banking services – such as through upgrading collateral registries and creditor rights protection – may be appropriate (Beck *et alii*, 2009; Gulde *et alii*, 2006).

Financial market size is also strongly related to the size of the economy – a finding that is true for both equity and debt markets – with the size and activity of most exchanges aligned with each country's level of economic development. This suggests that some countries may be too small to develop viable capital markets even with appropriate macroeconomic policies and institutions, leading to calls for regional equity markets and ...

³ Most exchanges now have automated trading and a central depository system. The frequency of trading has also increased, with most exchanges trading equities five days a week—though some trade for only a few hours a day.

Table 1: Banking indicators in 2008

	Credit to the private sector (% GDP)	Bank concentration (% of assets owned by three largest banks)	Deposit money bank assets (% of GDP)
COUNTRY AVERAGE OF DEVELOPING AND EMERGING ECONOMIES BY REGION			
Sub-Saharan Africa	20.9	81.2	23.3
Latin America and the Caribbean	46.0	66.8	50.6
Europe and Central Asia	45.1	64.6	40.0
East Asia and Pacific	57.3	64.4	53.6
South Asia	40.2	53.2	45.3
Middle East and North Africa	46.7	70.1	64.3
COUNTRY AVERAGES BY INCOME GROUPE			
High-income	117.8	73.6	117.4
Upper middle-income	50.9	67.5	54.8
Lower middle-income	40.7	64.7	40.3
Low-income	18.8	79.5	21.2
WORLD AVERAGE	60.0	71.1	62.3

All data is from 2008 where available. Data from 2007 is used for countries where 2008 data was not available. Data on bank concentration, deposit money and bank assets is from 2007. Source: IMF International Financial Statistics; World Bank World Development Indicators; and Beck *et alii*, 2009

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... regional bond issues to help overcome scale constraints. The most prominent regional initiative to date has been the Abidjan-based Bourse régionale des valeurs mobilières (BRVM), although its ability to overcome problems that plague small exchanges has been limited⁴. Establishing functional regional exchanges is complex, requiring significant technological investment and the surmounting of non-trivial administrative and political barriers. For example, participating countries need to harmonise their trading systems, legal regulations, reporting standards and taxation schemes. Stock markets are also potent national symbols, and political resistance may arise in countries joining a regional exchange based elsewhere⁵.

The launch of regional exchanges may thus be unrealistic in the short term. Initiatives to partially integrate markets, however, may be constructive alternatives. In particular, smaller exchanges may profit by capitalising on existing systems of more advanced exchanges in their region. Such efforts include cross-listing stocks, harmonising listing requirements and regulations, and jointly using automated systems. Some efforts are already underway. Firms from several countries for example, have already cross-listed stocks both domestically and on the JSE. Exchanges in the Southern African Development Community (SADC) have also tried to integrate more deeply by harmonising their company listing requirements based on the JSE systems. In East Africa, several Kenyan companies have cross-listed in Tanzania and Uganda, and the three exchanges have also established a common Securities Regulatory Authority and initiated a joint automated trading platform. Such efforts should be encouraged more widely alongside strategies to strengthen legal frameworks as constructive steps to help develop financial markets. ●

Table 2: Indicators for selected stock exchanges at the end of 2008

	No. of listed domestic companies	Market capitalization (USD bn)	Value traded (USD bn)	Turnover ratio (%)	Market capitalization (% of GDP)
Botswana	19	3.6	0.14	3.1	27.4
Côte d'Ivoire	38	7.1	0.32	4.1	30.2
Ghana	35	3.4	0.15	5.2	21.1
Kenya	53	10.9	1.44	11.8	31.6
Malawi	14	1.8	0.06	3.9	41.5
Mauritius	41	3.4	0.40	8.9	39.8
Nambia	7	0.6	0.02	2.8	7.2
Nigeria	213	49.8	19.95	29.3	23.5
South Africa	425	491.3	401.49	60.6	177.5
Swaziland	7	0.2	0.00	0.0	7.8
Tanzania	7	1.3	0.01	2.1	6.3
Uganda	6	0.1	0.01	5.2	0.8
Zambia	15	2.3	0.07	4.1	16.4
Zimbabwe	81	5.3	0.81	5.1	n.a.
SSA sum	961	581.1	424.9	...	89.5
SSA sum excl. South Africa	536	89.9	23.4	...	24.1
REGIONAL AND GLOBAL AVERAGES					
Sub-Saharan Africa	69	41.5	30.3	10.4	33.2
Sub-Saharan Africa excl. South Africa	41	6.9	2.3	6.6	21.1
Latin America and the Caribbean	91	78.6	75.4	14.1	33.2
Europe and Central Asia	354	109.0	52.0	34.1	19.6
East Asia and Pacific	534	413.0	714.0	50.5	56.7
South Asia	1 249	137.0	223.0	72.6	25.0
Middle East and North Africa	166	36.4	19.8	37.6	61.7
High-Income OECD	982	947.0	2 530.0	124.4	48.4
OTHER EMERGING MARKETS					
Kazakhstan	74	31.1	3.4	11.7	23.5
Peru	199	55.6	5.1	6.3	43.7
Thailand	476	102.6	116.8	78.2	39.4

Data for Zambia and Zimbabwe is from end-2007. Market capitalisation data for Swaziland is from end-2007 and for Uganda, end-2006. Value traded data for Swaziland, Tanzania and Uganda is from end-2006. Data for Cameroon, Cape Verde, Mozambique and Rwanda is not included due to low levels of activity.

Turnover ratio: annual volumes traded divided by market capitalisation.

Source: S&P Emerging Market Database, World Bank World Development Indicators

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⁴ The BRVM has branches in each participating country and trading takes place through satellite links with a centralized settlement and clearing system. While the exchange has grown, it still suffers from size and liquidity shortcomings. Activity has also been mostly limited to Ivorian firms and companies in smaller member countries have not benefited substantially.

⁵ An announced regional exchange for central Africa never got off the ground after disagreement about the host country. Competing exchanges in Gabon and Cameroon have been essentially inactive.