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Various smart beta indices in South Africa outperformed the market-cap-weighted S&P South Africa Composite.

Is Smart Beta Possible in Africa?

INTRODUCTION

Indexing is growing at a rapid pace globally, and it is thought that many developed market participants are selecting index-based funds as their default investment option these days. With data moving more freely and frequently in the world, the range of rules-based and transparent indices being developed has increased rapidly, focusing not only on market-cap-weighted indices, but also on ESG, smart beta, multi-factor, and multi-asset solutions.

Alternatively weighted—or smart beta—strategies are among the fastest-growing and hottest investment topics. They range from the basic concepts of equal-weighted indices to dividend-yield-weighted strategies and the more exciting multi-factor indices we are seeing today.

Smart beta strategies are mainly designed to provide access to a wide array of return-enhancing risk premia (or risk factors). These factors are typically grouped under volatility, momentum, quality, growth, value, dividend yield, and size. Various indices have been launched based on global, developed, and emerging markets, but the question of whether smart beta can work in Africa is coming up more frequently.

SMART BETA IN SOUTH AFRICA

As of December 2016, the South African equity market made up nearly 90% of African listings, as measured by the [S&P Pan Africa BMI](#). S&P Dow Jones Indices has developed a range of South African smart beta indices that focus on dividends, low volatility, quality, momentum, equal weight, and value. Multi-factor indices like the S&P GIVI Indices, which combine low beta and intrinsic value, have also been rolled out successfully. Today, ETFs and unit trusts are available based on almost all the South Africa-based smart beta indices listed in Exhibit 1. These products are competing with traditional active managers due to their nature of delivering returns different from a fund linked to a market-cap-weighted index. Over three-, five-, and seven-year periods, one can see that various smart beta indices in South Africa performed much better than the market-cap-weighted [S&P South Africa Composite](#).

Exhibit 1: South Africa Smart Beta and Market-Cap-Weighted Index Performance			
INDEX NAME	3-YEAR (PER YEAR) (%)	5-YEAR (PER YEAR) (%)	7-YEAR (PER YEAR) (%)
MARKET-CAP-WEIGHTED INDICES			
S&P South Africa Composite	6.56	12.53	10.55
ALTERNATIVELY WEIGHTED INDICES			
S&P Momentum South Africa	5.36	18.06	18.89
S&P Quality South Africa Index	5.99	14.27	18.08
S&P South Africa Dividend Aristocrats	11.91	17.81	17.94
S&P South Africa Low Volatility Index	9.55	17.15	17.57
S&P Low Beta South Africa Composite	8.20	15.72	15.74
S&P GIVI South Africa Composite Index	7.33	14.26	14.96
S&P South Africa 50 Equal Weight Index	7.68	12.93	13.97
S&P Intrinsic Value Weighted South Africa Composite	5.02	10.69	12.04
S&P Enhanced Value South Africa Composite Index	6.00	11.87	9.98

Source: S&P Dow Jones Indices LLC. Data as of Oct. 31, 2016. Index performance based on total return in ZAR. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

SMART BETA IN AFRICAN MARKETS EX-SOUTH AFRICA

With this limited universe, one could not remove stocks, but only tilt them based on the smart beta factor considered.

The South African equity market is an emerging market with a sizeable amount of stocks covering various sectors, two elements that most other African markets lack. Trying to develop smart beta indices for markets with less than 20 tradeable stocks becomes challenging. Another aspect that could limit the development of smart beta indices in Africa is a lack of data. Reliable data on dividends, return on equity, price-to-book ratios, earnings growth, analyst earnings forecasts, etc., is central to designing some of the new smart beta strategies we see globally.

The Global Research & Design team at S&P Dow Jones Indices is always up for a challenge, so when we were approached two years ago to construct a range of smart beta indices for Nigeria, we could not resist. Faced with limited tradeable stocks and a lack of sector diversification, we preferred to use the [S&P Nigeria Select Index](#) as a starting universe, rather than the S&P Nigeria BMI (Broad Market Index). The S&P Nigeria Select includes additional liquidity filters, so the index only represents the most liquid stocks on the Nigerian Stock Exchange. This meant we were limited to a universe of about 20 stocks to “play” with. With this limited universe, one could not remove stocks, but only tilt them based on the smart beta factor considered. This approach differs from the approach we use in most smart beta indices, in which the smart beta index is a subset of the benchmark. For example, the [S&P 500[®] Low Volatility Index](#) and [S&P 500 Quality Index](#) each include about 100 stocks, a subset of the stocks in the [S&P 500](#).

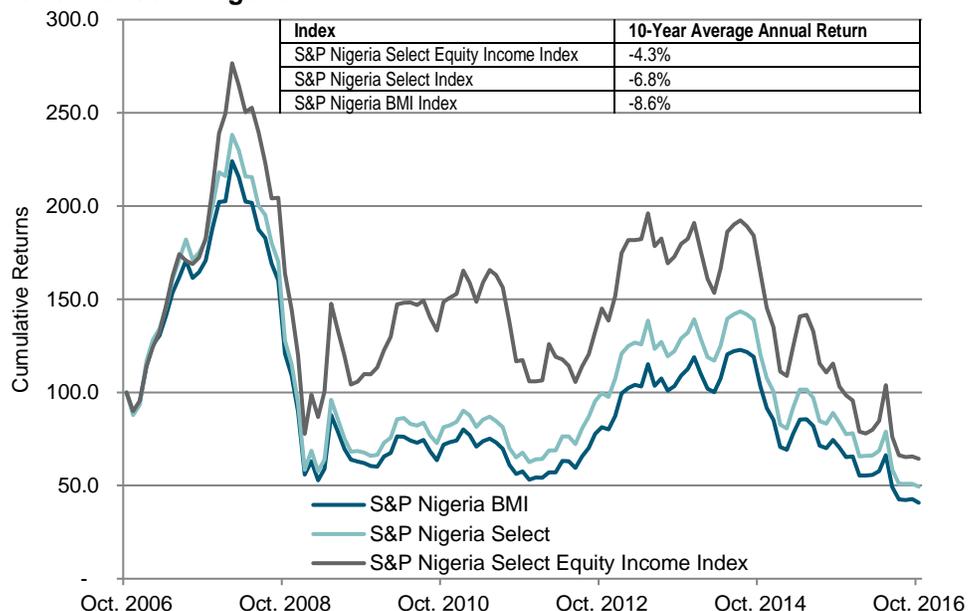
For Nigeria, we modeled four strategies: low volatility, dividend yield, momentum, and equal-weighted indices. The results show that smart beta can work in Nigeria, as all four of the smart beta strategies outperformed the S&P Nigeria BMI. One of the indices we launched was an index that weighted stocks by their dividend yield. We called it the [S&P Nigeria Select Equity Income Index](#).

Over the past 10 years, the S&P Nigeria Select Equity Income Index outperformed the S&P Nigeria BMI by more than 4% per year in USD terms. Over the 12-month period ending Oct. 31, 2016, it outperformed the S&P Nigeria BMI by 7% in Nigerian naira terms (see Exhibit 2). Another observation in African equity markets is the effect of liquidity. The more liquid [S&P Nigeria Select](#) also outperformed the S&P Nigeria BMI by an average of 1.8% per year over the 10-year period in USD terms.

As mentioned in our educational piece “[Developing an Appropriate Benchmark Index for African Equity Funds](#),” S&P Dow Jones Indices has developed a range of indices that seek to track the largest and most liquid stocks per region. One could look at these indices as a smarter way to measure the performance of African equity markets. The [S&P East Africa 10](#), which is designed to measure the largest and most liquid companies in Kenya, outperformed the [S&P East Africa](#) by 1.5% per year in USD terms over the past five years. Similarly, the [S&P Pan Africa ex-South Africa Select](#) outperformed the [S&P Pan Africa Ex South Africa BMI](#) by 3.4% per year (see Exhibit 3).

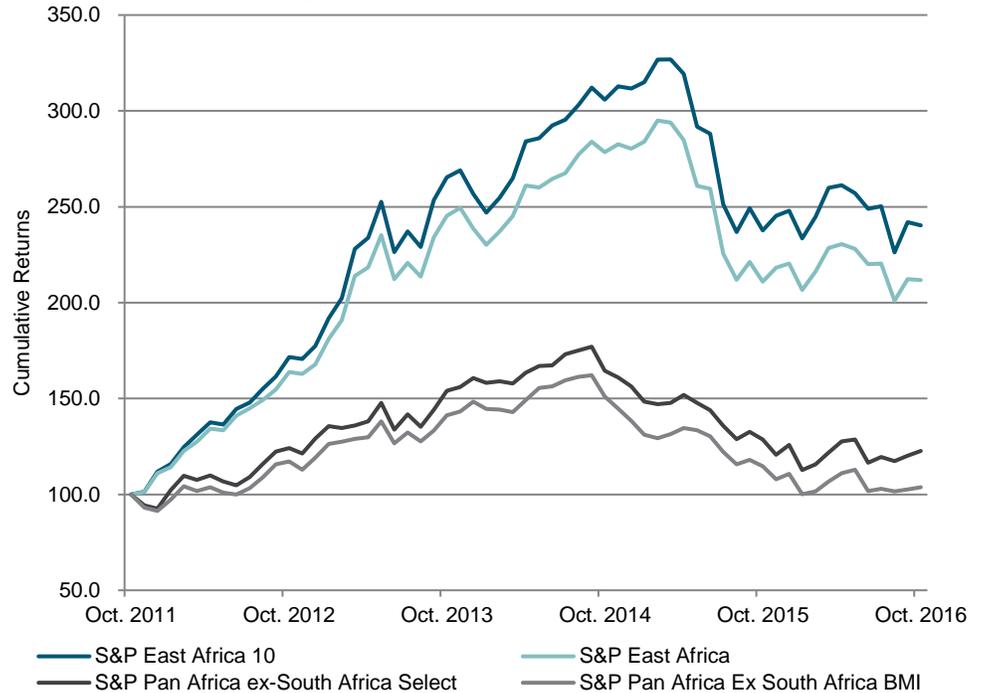
S&P Dow Jones Indices has developed a range of indices that focus on the largest and most liquid stocks per region.

Exhibit 2: Alternatively Weighted Versus Market-Cap-Weighted Index Performance in Nigeria



Source: S&P Dow Jones Indices LLC. Data from Oct. 31, 2006, to Oct. 31, 2016. Index levels based on 100 as of Oct. 31, 2006. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 3: East Africa and Pan Africa ex-South Africa Alternatively Weighted Versus Market-Cap-Weighted Index Performance

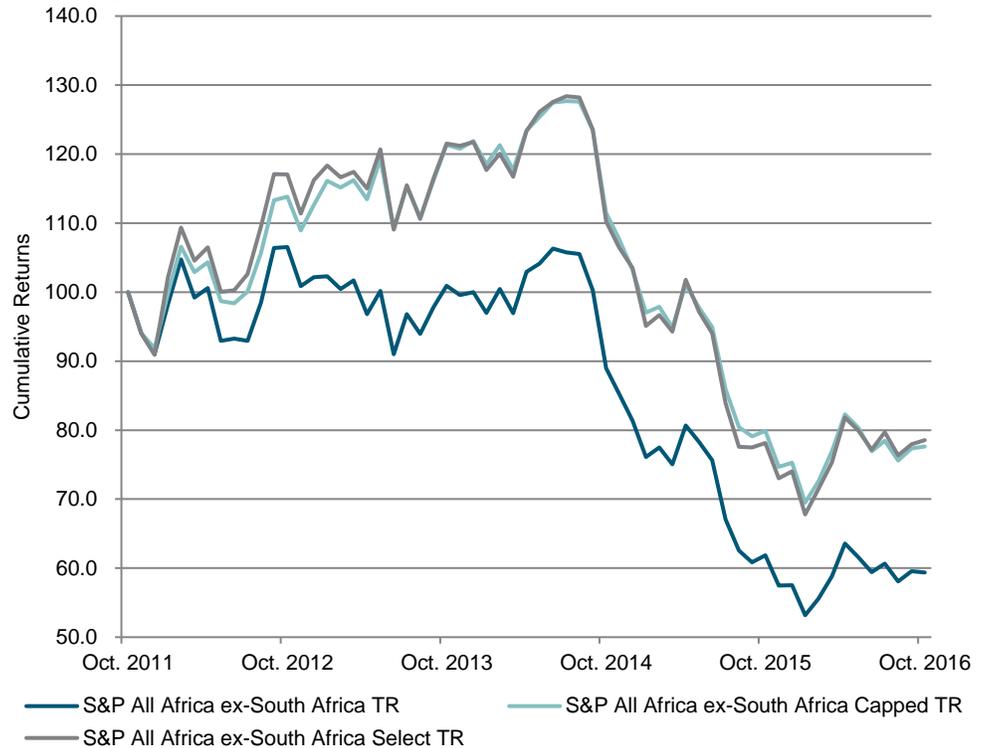


Rather than focusing on smart beta factors, it may be a better idea to be smart about how to access African beta.

Source: S&P Dow Jones Indices LLC. Data from Oct. 31, 2011, to Oct. 31, 2016. Index levels based at 100 as of Oct. 31, 2006. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Rather than focusing on smart beta factors, it may be a better idea to be smart about how to access African beta. Diversification could be something to keep in mind when considering investing in Africa. This seems to be true when looking at the performance differences between indices like the [S&P All Africa ex-South Africa Capped](#) and [S&P All Africa ex-South Africa](#), or even between the [S&P All Sub-Saharan Africa ex-South Africa Capped Index](#) and [S&P All Sub-Saharan Africa ex-South Africa Index](#). The capped and select versions can be argued to be alternatively weighted indices or even smart beta indices, as they are not purely market cap weighted. Rather, they cap certain country, sector, and stock exposures, causing them to be more diversified and alternatively weighted than the market-cap-weighted indices.

Exhibit 4: All Africa ex-South Africa Alternatively Weighted Versus Market-Cap-Weighted Index Performance



Source: S&P Dow Jones Indices LLC. Data from Oct. 31, 2011, to Oct. 31, 2016. Index levels based at 100 as of Oct. 31, 2006. Index performance based on total return in USD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Multi-asset solutions that blend equity and bond exposure can also be considered as a smart approach to accessing the African market outside of South Africa.

CONCLUSION

Various approaches to smart beta can be considered for Africa. It is definitely possible to construct African smart beta indices, as seen in South Africa and Nigeria; however, developing these indices can be tricky. The Nigerian indices could not be approached the same way as in South Africa and more developed markets. Before focusing too much on country-specific smart beta indices in Africa, we may need to wait until the African markets have increased in size, tradability, and diversification. Multi-asset solutions that blend both equity and bond exposure can also be considered as a smart approach to accessing the African market outside of South Africa.

PERFORMANCE DISCLOSURE

The S&P South Africa Composite and the S&P South Africa 50 Equal Weight Index were launched on February 6, 2014. The S&P Momentum South Africa was launched on November 18, 2014. The S&P Quality South Africa Index was launched on December 10, 2014. The S&P South Africa Dividend Aristocrats and the S&P South Africa Low Volatility Index were launched on January 29, 2014. The S&P Low Beta South Africa Composite and the S&P Intrinsic Value Weighted South Africa Composite were launched on April 16, 2015. The S&P GIVI South Africa Composite Index was launched on April 3, 2014. The S&P Enhanced Value South Africa Composite Index and the S&P Enhanced Value South Africa Composite Index were launched on April 27, 2015. The S&P Nigeria Select was launched on July 6, 2011, the S&P Nigeria Select Equity Income Index was launched on November 17, 2014, the S&P East Africa 10, the S&P East Africa, the S&P All Africa ex-South Africa, the S&P All Africa ex-South Africa Capped, and the S&P All Africa ex-South Africa Select were launched on May 2, 2014. The S&P Pan Africa Ex South Africa BMI was launched on January 1, 2008. The S&P Pan Africa ex-South Africa Select was launched on September 18, 2015. The S&P All Sub-Saharan Africa ex-South Africa Capped Index was launched on June 25, 2014. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. Complete index methodology details are available at www.spdji.com.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

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Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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