

How to “buy the market” in South Africa

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May 2015

The concept to “buy the market” is used in reference to an investment that provides exposure to the overall equity market. As simple as this may sound – and it is simple in practise if you buy an Exchange Traded Fund (ETF) or similar index tracker – it is the definition or interpretation of “the market” that needs closer inspection.

There are more than 300 shares listed on the main board of the JSE, with a combined full market capitalisation of around R12 trillion¹. In a theoretical sense, this would be defined as the domestic equity “market”. But not all of this is available for trade. Let us introduce a few concepts:

Free float

Many companies have some strategic shareholders that owns a specific portion of the issued shares (e.g. Old Mutual owns ±50% of Nedbank). These shares are not available for trade by other shareholders. If we exclude these, the available market capitalisation of the JSE drops by ±25% to under R9 trillion. This remaining portion is known as the “free float”. Many would argue that this is what is meant by “the market”, and this is certainly how the financial media presents it to the layman. Professional investors however, understand that this is not a fair representation of the investable domestic equity market.

So what is “the market” with reference to what is investable in the domestic equities?

SWIX free float (SWIX ≡ Shareholder Weighted Index)

Shares that are listed on more than one stock exchange only have a portion of their shares available for trade on the JSE. The SWIX free float represents the proportion of a company’s share capital that is registered on the South African share register, maintained by Strate. Once the SWIX free float has been taken into consideration, the available market capitalisation is less than half of the original number, around R5.6 trillion. This is by design intended to represent the investment opportunity set for the domestic equity investor.

So if this correctly defines “the market”, how do we measure the performance of it?

All Share Index (ALSI) and Shareholder Weighted Index (SWIX)

Stock market indices have long been used as benchmarks and measures of aggregate performance. The FTSE/JSE Africa Index series is governed by a clear set of index ground rules and a specified calculation methodology. One of these rules define that the ALSI will be constituted by the shares that make up 99% of the eligible market cap of all the shares on the JSE Main Board. It does not have a fixed number of constituents, but typically consists of ±160 companies. Therefore, although the ALSI constitutes 99% of the size of the JSE (based on market cap), it consists of only about half of the listed companies (measured by number of listings). The ALSI index currently has a market cap of R7.3 trillion, whereas the SWIX index weighs in at R5.5 trillion. Thus, if an investor wants to “buy the market”, he would be able to do so, with 99% confidence, by buying only half of the companies listed on the JSE.

Although it is possible to buy a portfolio of shares that fully represents the ALSI or the SWIX, it is not very cost effective to do so, especially for a smaller institutional or retail investor. The JSE thus introduced another level of distillation, the so-called tradable indices.

¹ All market data as at 30 April 2015, sourced from FTSE/JSE, S&P DowJones and ProfileMedia

The Top 40 Index (Top40)

It is a fairly common practise amongst stock exchanges and index providers to group shares according to size “buckets” such as large cap, mid cap and small cap stocks. The FTSE/JSE Top40 Index is the flagship tradable index of the JSE, and although it consists of only 40 companies (one quarter of those included in the ALSI), at R6 trillion it represents around 83% of the free float market cap. For many investors, the cost efficiency of investing in “only” 40 shares far outweigh the “lost opportunity” presented by the 17% of the market in which they are not invested.

The Top40 is thus what is commonly referred to as “the market” when reference is made to investment in domestic equities.

Investors are spoilt for choice when it comes to selecting ETFs that track the large cap stocks on the JSE – there are currently 10 ETFs listed in this category. There are three ETFs that track the **free float market cap weighted Top40**, offered by **Satrix** (STX40), **RMB** (RMBT40) and **Stanlib** (STAN40), and three ETFs that track the **shareholder weighted version, the SWIX40**, offered by **Satrix** (STXSWX), **ABSA/Barclays** (NFSWIX) and **Stanlib** (STANSX). In addition to these six ETFs, **ABSA/Barclays** also offers an ETF that tracks a **Shari’ah-compliant subset of the Top40** (NFSH40). This index excludes all constituents that don’t meet the Islamic finance criteria – the remaining constituents (currently only 15 pass the screen) are still weighted according to their free float market cap.

Indices and index investing have long since evolved from the simplistic concept of market cap weighting, and the term “smart beta” (also called strategic beta or factor beta) is getting a lot of attention, and attracting an increasing amount of assets. There are a number of indices, and ETFs, that use different selection criteria and weighting methodologies, and these offer different variants of exposure to the investable and tradable indices. Within the Top40, or large cap space, there are two additional ETFs available on the JSE:

1. The **BettaBeta Equally Weighted Top40** ETF (BBET40) tracks the equal weighted version of the Top40 index – it has exactly the same 40 constituents, but each of them are weighted at 2.5% at the quarterly rebalancing. Equal weighting is one of the simplest modifications to market cap weighting, and addresses many of the shortcomings of index investing identified by critics of the so-called ‘passive’ investment strategy.
2. The **Satrix RAFI40** ETF (STXRAF) tracks the RAFI40 index, which has been designed to reflect the performance of companies as measured by fundamental values (e.g. sales, cash flow, book value and dividends). Both the constituents and their weights are derived from these company fundamentals. As the RAFI methodology do not select constituents on the basis of size (market cap), there are some differences between the qualifying constituents (about 10 of the 40 constituents are different), but there are some significant differences in index weight (refer to the graphs and tables further down).

The latest option available for selection at the “market” buffet, comes in the form of the newly listed **CoreShares S&P South Africa Top50** ETF (CTOP50). As its name suggests, this offering ventures somewhat beyond the traditional large cap universe as defined by FTSE/JSE, and includes 10 additional shares selected from the mid cap space. The result is slightly better diversification (also evident from a marginally lower standard deviation), and periodic outperformance of its traditional second cousin, the Top40 (depending on the specific measurement period).

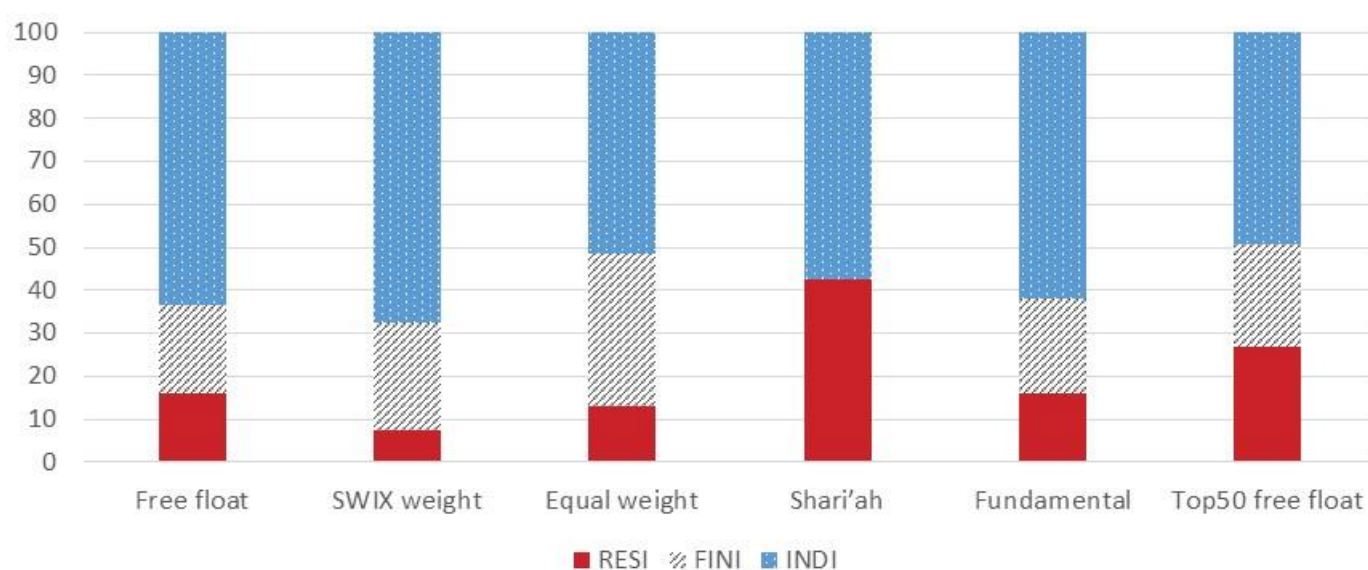
The range of options to “buy the market”, available to an investor on the JSE, are summarised in the table below. Selected comparative graphs highlight the relative exposures at different levels: economic groups, strategic sectors, size variants as well as stock-specific exposures.

“The Market”	Free float market cap	Shareholder weighted	Equally weighted	Shari’ah- compliant	Fundamental indexation	Top50 free float
Index information						
Index provider	FTSE/JSE	FTSE/JSE	FTSE/JSE	FTSE/JSE	RAFI	S&P-DJ
# of companies	40	40	40	15	40	50
% in 10 biggest stocks	66.1%	58.6%	27.5%	93.8%	64.0%	62.2%
# of stocks to 80%	17	20	32	6	18	20
ETF information						
Brand / ETF provider(s)	Satrix; Stanlib; RMB	Satrix; Stanlib; NewFunds	BettaBeta	NewFunds	Satrix	CoreShares
JSE share code	STX40; STAN40; RMBT40	STXSWX; STANSX; NFSWIX	BBET40	NFSH40	STXRAF	CTOP50
TER (bps)	45 / 23 / 16	45 / 32 / 33	29	60	52	20
Performance history (% p.a.)²						
Total return – 1yr	13.3	19.2	11.6	-6.3	8.5	15.4
Risk (Std dev) – 1yr	8.4	7.2	9.9	17.7	10.6	7.7
Risk-adj return – 1yr	1.59	2.68	1.17	-0.36	0.80	2.00
Total return – 3yr	20.2	22.0	16.5	11.8	16.9	20.8
Risk (Std dev) – 3yr	11.3	10.2	10.5	16.7	11.5	10.6
Risk-adj return – 3yr	1.79	2.16	1.57	0.71	1.47	1.97
Total return – 5yr	16.8	18.6	15.9	8.3	15.0	17.7
Risk (Std dev) – 5yr	13.1	12.1	11.8	17.6	12.8	12.4
Risk-adj return – 5yr	1.29	1.53	1.34	0.47	1.17	1.43

Note: The best in each category has been highlighted in green, and the worst in red

Comparative exposures (% weight in index):

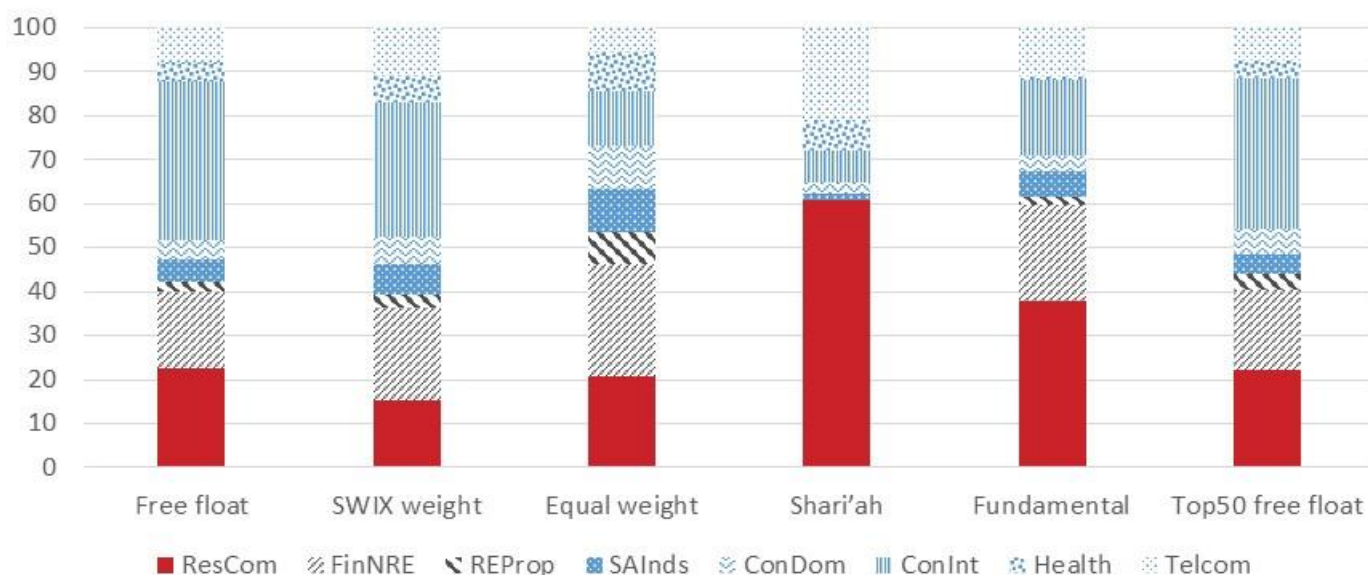
Economic groups



Legend: RESI Resources FINI Financials INDI Industrials

² Performance of the indices are shown, rather than those of the ETFs that track them

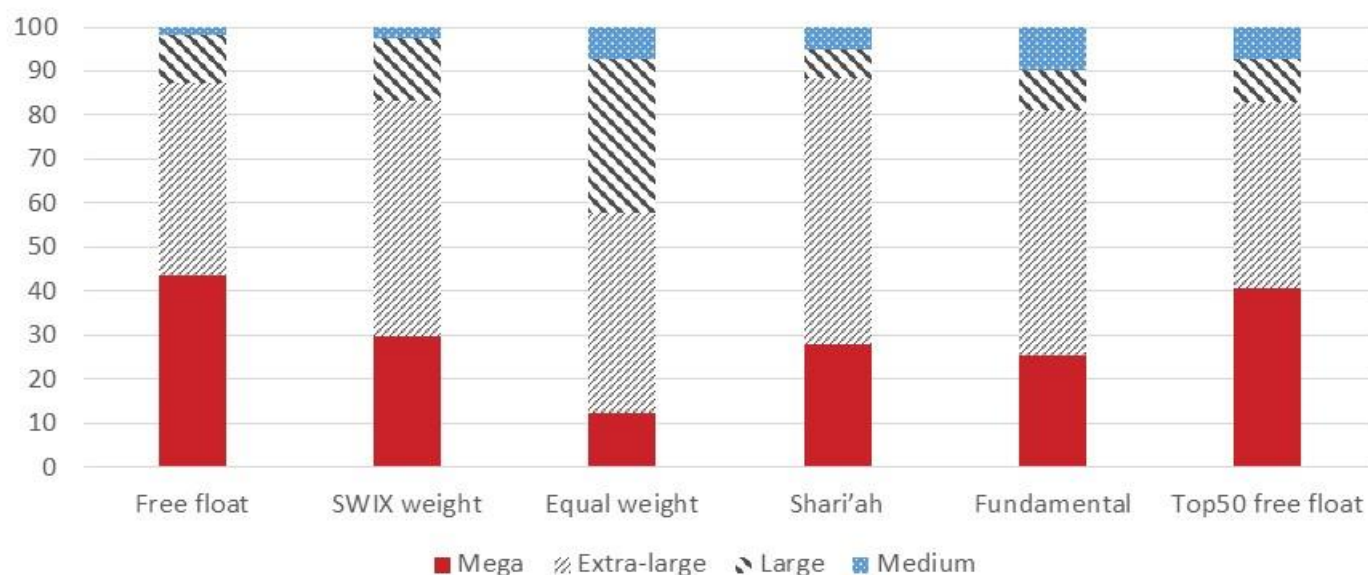
Strategic sectors



Legend:

ResCom	Resources & Commodities
FinNRE	Financials (non-real estate)
REProp	Real Estate / Property
SAInds	SA General Industrials, Transport, Electrical, Construction, etc.
ConDom	Domestic Consumer (Retailers, Food, Travel & leisure etc.)
ConInt	International Consumer (SAB, BTI, CFR, NPN etc.)
Health	Healthcare
Telcom	Telecommunication

Size variants



Legend:

Mega	>R500m full market cap
Extra-large	R100m-R500m full market cap
Large	R50m-R100m full market cap
Medium	<R50m full market cap

Stock-specific exposures – ranked according to full market capitalisation

Stock-specific exposure (%)	Free float market cap	Shareholder weighted	Equally weighted	Shari'ah-compliant	Fundamental indexation	Top50 free float
BTI	3.31	4.61	2.36	---	2.63	2.25
SAB	10.30	4.14	2.29	---	9.17	5.78
NPN	11.16	15.56	2.58	---	10.38	1.90
BIL	10.04	2.52	2.66	27.81	9.59	10.35
CFR	8.82	2.82	2.47	---	8.87	4.95
MTN	6.93	9.65	2.65	18.77	5.85	9.11
FSR	2.84	3.96	2.49	---	2.91	2.40
SOL	4.38	6.11	2.91	12.41	3.89	7.64
SBK	3.47	4.84	2.71	---	3.33	5.38
AGL	4.35	2.96	2.46	12.43	4.44	9.58
SHF	2.61	3.63	2.74	7.10	3.35	2.21
VOD	0.80	1.12	2.73	2.20	1.20	1.03
OML	3.31	2.74	2.51	---	3.36	6.19
SLM	2.23	3.11	2.33	---	1.99	2.12
APN	1.82	2.54	2.22	---	1.66	---
BGA	1.01	1.41	2.61	---	0.98	1.63
NED	0.83	1.15	2.53	---	0.72	1.22
REM	2.10	2.93	2.36	---	1.87	1.11
MNP	1.93	1.47	2.35	5.20	1.84	1.65
MDC	0.90	1.26	2.37	2.43	0.80	---
BVT	1.71	2.38	2.40	---	1.45	2.63
INP	1.56	1.37	2.61	---	1.59	2.11
RMH	0.79	1.09	2.47	---	0.84	---
SHP	1.22	1.70	2.64	---	1.03	1.28
WHL	1.30	1.82	2.52	---	1.06	0.83
AMS	0.32	0.45	2.48	0.87	---	---
DSY	0.70	0.98	2.72	---	0.76	---
ITU	0.95	0.70	2.38	---	0.84	0.92
GRT	1.12	1.56	2.70	---	0.79	1.01
MPC	0.98	1.36	2.42	2.63	0.95	---
NTC	1.01	1.41	2.32	2.81	0.98	0.81
CCO	0.37	0.52	2.41	---	0.86	---
TBS	0.82	1.15	2.18	---	0.95	0.68
ANG	0.90	0.66	3.07	---	0.87	1.90
KIO	0.15	0.21	2.18	0.42	---	0.62
REI	0.63	0.88	2.37	---	---	---
LHC	0.66	0.92	2.21	1.80	0.58	0.00
IMP	0.56	0.78	2.55	1.55	0.58	1.38
IPL	0.57	0.79	2.61	1.56	0.63	1.36
MMI	---	---	---	---	0.44	0.82
BAT	---	---	---	---	0.40	---
RDF	---	---	---	---	0.68	---
TKG	---	---	---	---	0.40	0.94
GFI	---	---	---	---	0.62	2.11
TFG	---	---	---	---	0.43	---
TRU	---	---	---	---	0.50	---
RES	---	---	---	---	0.49	---
SPP	---	---	---	---	0.44	0.82
CML	---	---	---	---	0.37	---
NPK	---	---	---	---	0.35	---
AVI	---	---	---	---	0.35	---
SAP	---	---	---	---	0.36	0.84
SGL	---	---	---	---	---	0.59
BAW	---	---	---	---	---	0.77
LON	---	---	---	---	---	0.53
HAR	---	---	---	---	---	0.56