

EVERYONE'S
GUIDE
TO
ETFs

(Exchange-Traded Funds)

**The building blocks for your
tax-free savings account**

Welcome to exchange-traded funds

The key to wise investing is diversification. Spreading your investments between various exposures ensures the best balance of risk and return. Exchange-traded funds (usually just called “ETFs”) provide the cheapest and easiest way to do that. They’re so efficient that National Treasury has decided they are the right instruments to use for tax-free savings accounts (TFSAs) offered by stockbrokers. There are currently 45 of them available on the JSE, though not all are eligible for TFSAs.

Research house Intellidex teamed up with EasyEquities and Savetaxfree.co.za to bring you this overview on the ETF’s available in the SA market. Building a portfolio of ETFs is the best way to use your TFSA – low-cost portfolios plus you don’t have to pay any tax on your returns!

Of course, it’s important to remember that investing involves risk. You could lose your money. But, in the long run, equities have proven to be a better source of return than almost any other investment strategy.

Investing in funds is nothing new. South Africa has a long history of unit trusts (which are now called collective investment schemes). ETFs provide much the same kind of service, but are usually cheaper and also much easier to buy into and sell out of.

The key difference between an ETF and a unit trust is that ETFs are listed on the JSE so you can buy or sell them just like a share. That means the prices are visible all day and the only cost you incur in buying them is the brokerage you pay (with EasyEquities that’s a market low of 0.25%). In contrast, unit trust

prices are only set at the end of the day and you usually have to pay an upfront fee of up to 3.5% when you invest plus an ongoing fee that can be as high as 2% each year. ETFs have an annual fee imbedded in them, but for local assets that’s usually less than 0.5%.

The other major difference is that ETFs are usually “tracker funds” so they track a basket or index. Unit trusts are often actively managed, so a fund manager is making decisions over which stocks to invest in. You may think that means returns will be better, but plenty of studies show that in the long run actively managed funds tend to return the same as the whole market, but fees mean the net return is lower. ETFs give you a much cheaper way to track the market as a whole.

ETFs invest in various asset classes, such as shares, bonds, property and commodities. Equities is the most popular asset class used in ETFs.

Equities are the shares of companies. ETFs invest in a portfolio of them, using an index. Among the most popular are funds that track the JSE’s top 40 index. These invest in the 40 biggest JSE-listed shares mostly in proportion to those shares’ market capitalisation (which is the total value of the companies’ shares).

Then there are ETFs focusing on specific sectors such property companies, industrial or financial stocks. Some even focus on investment themes such as growth stocks (fast-growing companies) or lower-risk shares with low volatility. There are even ETFs for offshore investments that track the biggest companies listed on stock exchanges in Europe, the US, UK and Japan.

In South Africa you can also obtain ETFs that invest in commodities like gold, platinum and palladium. However, such ETFs that invest in a single commodity are not allowed in tax-free

savings accounts, while those that invest in a number of different resource companies, such as the Satrix Resi or NewFunds S&P GIVI SA Resources, are allowed.

In this guide we review most of the ETFs available in the market place. We have classified them into themes according to the type of asset class or strategy they use. The ones we review are all available for use in tax-free savings accounts. First we list all of the ETFs listed on the JSE. These reviews were conducted in the first half of 2016, so be aware that some numbers might be out of date.

Please let us know any feedback.

The Intellidex Team

Email info@intellidex.co.za

Compiled by Intellidex (www.intellidex.co.za)
Analysts: Orin Tambo and Phibion Makuwerere
Sources: Intellidex analysts, ETFSA.co.za, fund fact sheets
Editor: Colin Anthony

© Copyright 2016. This document is copyrighted to Intellidex (Pty) Ltd and may not be distributed or copied from in any way without the prior written permission of Intellidex.

Disclaimer

This guide was developed to assist retail investors in their understanding of the available ETFs in the market place. It does not constitute investment advice! It is always a good idea to obtain the advice of a qualified and registered financial advisor in developing an investment plan.

This guide is published by Intellidex (Pty) Ltd. Intellidex aims to deliver impartial and objective assessments of securities, companies or other subjects. This document is issued for information purposes only and is not an offer to purchase or sell investments or related financial instruments. Individuals should undertake their own analysis and/or seek professional advice based on their specific needs before purchasing or selling investments. The information contained in this report is based on sources that Intellidex believes to be reliable, but Intellidex makes no representations or warranties regarding the completeness, accuracy or reliability of any information, facts, estimates, forecasts or opinions contained in this document. The information, opinions, estimates, assumptions, target prices and forecasts could change at any time without prior notice. Intellidex is under no obligation to inform any recipient of this document of any such changes. Intellidex, its directors, officers, staff, agents or associates shall have no liability for any loss or damage of any nature arising from the use of this document.

Contents

Welcome to exchange-traded funds	2
JSE exchange-traded funds	5
Top 40 funds	7
Ashburton Top40 ETF (formerly RMB Top40)	7
Stanlib Swix 40 ETF	8
Ethical investment funds	11
NewFunds Shari’ah Top 40	11
NewFunds NewSA ETF	12
CoreShares Green ETF	13
NewFunds S&P GIVI SA TOP 50	14
Other funds based on size of companies.....	16
Ashburton MidCap ETF	16
Industry-focused funds.....	18
NewFunds S&P GIVI SA Financial 15.....	18
NewFunds S&P GIVI SA Resource 15	19
NewFunds S&P GIVI SA Industrial 25.....	21
CoreShares PropTrax SAPY.....	22
Multi-Asset Funds.....	25
NewFunds MAPPS Growth ETF	25
Fixed Income Funds.....	27
Ashburton Inflation-X ETF	27
NewFunds ILBI (inflation-linked bond index) ETF.....	28
NewFunds TRACI 3 Month ETF	29
Dividend funds	31
Satrix DIVI ETF	31
Offshore funds	33
db X-tracker MSCI World Index ETF.....	33
Other specialist funds.....	35
CoreShares S&P South Africa Low Volatility	36
Coeshares Preftrax ETF.....	37

JSE exchange-traded funds

Below is the full list of ETFs trading on the JSE, after which we analyse a selection of the ETFs that are allowed into tax-free savings accounts.

Issuer	ETF
Absa Capital	
	NewGold
	NewGold Palladium
	NewPlat
	NewFunds Equity Momentum ETF
	NewFunds GOVI ETF
	NewFunds ILBI ETF
	NewFunds MAPPS Growth ETF
	NewFunds MAPPS Protect ETF
	NewFunds NewSA
	NewFunds S&P GIVI SA Financial
	NewFunds S&P GIVI SA Industrial
	NewFunds S&P GIVI SA Resources
	NewFunds S&P GIVI Top 50
	NewFunds Shari'ah Top 40
	NewFunds SWIX 40 ETF
	NewFunds TRACI 3 Month ETF
Ashburton*	
	Ashburton Government Inflation ETF
	Ashburton MidCap ETF
	Ashburton Top40 ETF
Deutsche Bank	
	DBX Euro
	DBX Japan
	DBX USA
	DBX UK
	DBX World
Grindrod Bank	
	CoreShares Dividend Aristocrats ETF
	CoreShares Green ETF
	CoreShares Low Volatility ETF
	CoreShares PrefTrax
	CoreShares PropTrax SAPY
	CoreShares PropTrax Ten

	CoreShares Top 40 Equally Weighted ETF CoreShares Top50
Satrix	
	Satrix 40 Satrix DIVI Satrix FINI Satrix INDI Satrix RAFI Satrix RESI Satrix SWIX
Standard Bank	
	Standard Bank Africa Gold ETF Standard Bank Africa Palladium ETF Standard Bank Africa Platinum ETF Standard Bank Africa Rhodium ETF
Stanlib	
	Stanlib SA Property ETF Stanlib SWIX 40 Stanlib Top 40

** Ashburton ETFs were formerly called RMB*

Top 40 funds

We begin with the “top 40” ETFs and their variations. These invest in the biggest 40 companies on the JSE, which are often referred to as blue-chip stocks. Top 40 ETFs are popular with investors because such companies tend to carry lower risk in that there is generally less chance of a big company going bankrupt than smaller ones. Furthermore, most of the bigger companies generate a chunk of their revenue outside SA, so they also offer geographical diversification and serve as a hedge against the rand. Variations include Shari’ah-compliant top 40 funds and funds that invest in the top 50 JSE stocks.

Ashburton Top40 ETF (formerly RMB Top40)

Suitability: Ashburton Top40 is a solid ETF choice for investors seeking steady returns and decent income but who can tolerate the risk associated with equity investments. It has been one of the best-performing funds in its category and offers among the lowest fees. It tracks a diversified index and can be considered as a core investment for the long term.

What it does: The fund tracks the JSE top 40 index, investing in the 40 largest listed companies. It weights its holdings by market capitalisation, so the bigger the company, the bigger percentage is invested in it. This means if Naspers accounts for 12% of the total market cap of the top 40 companies, then RMB Top40 will have 12% of the portfolio invested in Naspers. The Top 40 Index is weighted on quarterly basis which helps minimise trading expenses for the fund.

Advantages: The ETF offers easy access to the largest companies on the JSE through one investment. Many of the biggest companies on the JSE earn a significant portion of their earnings outside SA. The rand’s severe devaluation over the past few years, accelerating over the past few months, means foreign earnings are increased substantially when exchanged into rands.

Disadvantages: Market capitalisation weightings skew the portfolio towards the largest stocks, which might not necessarily be cheap ones. However, tracking the market-cap weighted top 40 index and rebalancing four times a year helps to ensure low turnover and reduce risk.

Risk: This is a 100% investment in equities, which is a riskier asset class than bonds or cash. It is likely to be volatile, but the returns should compensate for volatility in the long run. We think the sectoral and geographical diversity of the constituent companies as well as the fact that they are blue chip counters with good track records does diminish the risks to a degree.

So if you are an investor seeking general market performance through a well-diversified equity portfolio at low cost with decent dividend payments, then the RMB Top40 ETF is likely to be suitable.

Fees

Fees take a total of 0.16% out of RMB Top40’s returns each year, a comparatively low cost. For every

R1 000 invested in the fund, 160c goes to fees. This ETF offers the lowest fees in its category and also engages in securities lending. Securities lending is the practice of lending out of the fund's underlying holdings in exchange for a fee. A large portion of the proceeds are passed on to investors, which partially offsets the fund's expenses.

Historical performance

Annualised returns including re-investment of distributions after fees (as at 31 March 2016)				
Investment period	RMB Top40 ETF	JSE Top40 Index		Divergence
1 year	3.11%	3.29%		-0.18
3 years	12.42%	12.68%		-0.26
5 years	12.67%	13.04%		-0.37

Alternatives: Stanlib Top 40 offers a good alternative to the RMB Top40. The ETF has been one of the best performing from a return point of view and with total fees of just 24 basis points it's also the second-cheapest in its category. Over the past 12 months the fund outperformed its benchmark by 0.03%. It is slightly smaller than Satrix 40 and RMB Top40.

The Satrix Swix Top 40 is another option. It is the oldest in this category and has assets under management of more than R7bn. However, its fees are the highest in this category.

Other options are ETFs which track also track top 40 companies but apply different weighting methodologies. This obviously results in different weightings to those of RMB Top40.

The Nedbank BettaBeta Equally Weighted Top40 ETF tracks the JSE BettaBeta Equally Weighted Top40 Index. This ETF simply applies an equal weighting of 2.5% to each investment. The ETF is listed on the JSE and the Botswana Stock Exchange.

Other ETFs track the FTSE/JSE Shareholder Weighted Top 40 Total Return Index. In this category we have NewFunds Swix 40 and Stanlib Swix 40. These ETFs track the FTSE/JSE Swix Top 40 which adjusts the top 40 index to eliminate foreign holdings and cross-holdings of the constituent companies. This shareholder-adjusted ETF reduces volatility. What's important to note though is that these two ETFs have performed relatively better than RMB Top40 and its peers. Stanlib Swix 40 outperformed its benchmark by 0.05% over the past 12 months. The Satrix Swix 40 has a five year annualised return of 15.39% and the NewFunds Swix40 has a return of 16.37%. Fees for the two are also reasonably low.

Stanlib Swix 40 ETF

Suitability: The Stanlib Swix 40 ETF is ideal for investors with a long-term investment horizon which gives the portfolio enough time to weather short-term volatility that comes with equity investments.

Because the ETF tracks the largest companies on the JSE, it is an ideal vehicle for exposure to quality blue-chip companies and is less volatile than mid- and small-cap stocks. Furthermore, the 40 stocks are across industries and thus bring some diversification and can be considered as a core investment for the long term. The fund has slightly lower costs than close alternatives and a lower tracking error.

What it does: The Stanlib Swix 40 ETF aims to mimic the performance of the FTSE/JSE Swix top 40 index in terms of price performance as well as income from the component securities of the index. However, this index differs from the top 40 index in that it only considers the free-float market capitalisation of companies that are held on the JSE register. By considering the JSE register only, it means that dual-listed stocks are down-weighted because a significant portion of their shares are held offshore.

A free-float adjusted market capitalisation format is based on the market capitalisation of each company excluding locked-in shares such as those held by holding companies, founders and governments. The ETF is therefore more representative of the universe of shares actually available to South African investors.

The fund is rebalanced quarterly in line with the FTSE/JSE index rebalancing methodology and from time to time as a result of corporate actions.

Advantages

- In the long run it will theoretically outperform other major asset classes such as bonds and cash, albeit at elevated volatility.
- Easy access to the largest companies on the JSE through one investment at a lower cost than acquiring them individually.
- Many of the biggest companies on the JSE earn a significant portion of their earnings outside SA. The rand's severe depreciation over the past few years, accelerating over the past few months, means foreign earnings are increased substantially when exchanged into rands.
- Lower volatility than both small- and mid-cap stocks.

Disadvantages

- Market capitalisation weightings skew the portfolio towards the largest stocks, which diminishes diversification benefits. The Swix index partly addresses this skewness by rebalancing according to South African held shares. Companies like Anglo American and BHP Billiton therefore have a relatively low weight compared to the general Top 40 index.
- ETFs are passive instruments and do not make active bets, which is a concern in periods of poor economic activity, given that broadly, equities returns are linked to economic activity. However, the significant non-rand earnings component reduces correlation to the SA economy and empirical evidence shows that active portfolio management, on average, does not outperform passive investing.

Risk: This is a 100% investment in equities, which is a riskier asset class than bonds or cash. It is volatile, but the returns over time should compensate for volatility. Constituent companies operate

in several jurisdictions, mostly emerging economies, which somewhat elevates political and currency risk. However, the sectoral and geographical diversity of the constituents diminishes the risks to a degree.

Fees: The total expense ratio is 0.34%. Additional costs associated with trading the ETF include bid-ask spreads and brokerage fees.

Historical performance

Annualised returns before distributions and management fees @ 30 March 2016			
Investment period	Stanlib Swix 40	FTSE/JSE Swix top 40 Index	Tracking error
1 year	3.12%	3.08%	0.04%
3 years	n.a		

Ethical investment funds

Some investors today are investing not only with their heads but also with their hearts: not only for monetary return but also to promote concepts or ideals about which they feel strongly. Socially responsible investing has grown in popularity but is still a small part of the overall market. In SA such opportunities are limited. The JSE offers three ETFs that follow a social investment strategy: NewFunds Shari'ah Top40, NewFunds NewSA (both issued by Absa) and Nedbank BettaGreen (now called CoreShares Green ETF)

NewFunds Shari'ah Top 40

Suitability: The NewFunds Shari'ah Top40 is an investment instrument created to comply with Islamic ethical investing principles. The ETF will suit investors wanting to add equity exposure to their tax-free savings account while complying with the investment principles of Islamic law. This does not necessarily mean you are forgoing returns because ethical investments may, in the long run, also be the best performing investments. However this and other ethically based investment strategies do exclude investments that could be good performers.

What it does: The NewFunds Shari'ah Top 40 Index ETF tracks the performance of FTSE/JSE Shari'ah Top 40 Index, which is jointly established by FTSE International Limited (FTSE) and JSE Limited (JSE). The FTSE/JSE Shari'ah Top 40 Index is designed to reflect the Shari'ah compliant companies identified from the FTSE/JSE Africa Top 40 Index by Yasaar Ltd, which provides independent Shari'ah compliance solutions in terms of stringent Shari'ah standards and principles.

Disadvantage: One major weakness with socially responsible investing is the limited choices with regard to portfolio diversification. This is quite evident in this ETF which, after qualitative screens, ended up being concentrated in resources. It lacks in sector diversification.

Fees: For the year to end-March, 0.31% of the average net asset value of the portfolio was incurred as charges, levies and fees related to the management of the portfolio, which is below the average cost for ETFs.

Historical performance

Annualised returns assuming reinvestment of dividends @ 31 March 2016			
Investment period	Fund	Underlying index	Difference
1 year	-13.31%	-12.78%	-0.35
3 years	-0.25%	-0.27%	+0.02
5 years	1.05%	1.02%	+0.03

Since inception	4.65%	4.63%	+0.02
-----------------	-------	-------	-------

NewFunds NewSA ETF

Suitability: Social investing is gaining momentum globally as more and more people become conscious of “ethical” investing. The NewSA ETF is peculiar to SA and born out of SA’s historical imbalances. Since 1994, the democratically elected government has pursued various channels to address financial imbalances created by Apartheid, with broad-based black economic empowerment (BBBEE) the cornerstone of its policy. The NewSA ETF invests in companies with superior BBBEE ratings and is thus suitable for investors who feel morally impelled to invest to support transformation – or if you believe that companies with superior empowerment ratings have an economic edge.

The fund consolidates 40 such companies and you can cost-effectively gain exposure through a single transaction. Its constituents are drawn from the FTSE/JSE Top 40 index, but with weightings determined by their empowerment (BBBEE) ratings. The BBBEE ratings are calculated by Empowerdex, but the index is constructed using the FTSE/JSE methodology.

What it does: The fund tracks the price performance of the NewSA index, which is a modified FTSE/JSE Top 40 index that weights the top 40 JSE-listed companies according to their empowerment ratings.

Risk: For some industries, such as retail, BBBEE ratings are not mandatory. So the trend is that those with BEE scorecards like banks and mining companies and those that generate some business from state entities have high BBBEE ratings. The implication is that the performance of constituents is likely to be correlated, that is, constituents perform well/poorly at the same time.

This is a pure equities investment, so the performance is likely to be more volatile than other asset classes such as bonds or cash.

Fees: For the year to end-March, 0.58% of the average net asset value of the portfolio was incurred as charges, levies and fees related to the management of the portfolio.

Historical performance: The fund’s performance depends on how you invest – through a single lump-sum payment or regular payments. The table below reflects the fund’s historical annualised returns for a lump-sum investment.

Annualised returns assuming reinvestment of dividends @ 31 March 2016			
Investment period	Fund	Underlying index	Difference
1-year	-5.00%	0.41%	-4.59%
3-year	10.01%	11.78%	-1.77%
5-year	12.44%	13.42%	-0.98
Since inception	10.46%	10.89%	-0.43%

Alternatives: There are no direct peers.

CoreShares Green ETF

Suitability: Previously called the Nedbank BettaBeta Green ETF, Grindrod now manages the fund, which is another following a moral/ethical investment strategy. It focuses on the environment, informed by the Carbon Disclosure Project (CDP) and the UN register of clean development mechanism databases (CDM). The fund invests in environmentally friendly companies among the 100 largest companies on the JSE across sectors, thus ensuring diversification. This means it can serve as a good core equity investment for the long term. With much focus on the environment and other non-financial aspects of companies being lobbied by various pressure groups, it is possible that in the long run businesses that abide by these standards will outperform. However, the performance of the fund has been disappointing compared with the general top 100 JSE-listed companies' performance.

It is ideal for environmentally conscious investors with a long-term investment horizon – which gives the portfolio enough time to weather short-term volatility that can be expected in the case of equity investments.

What it does: The ETF tracks the Nedbank Green index, calculated independently by financial consultants Riscura, in both price and income performance. It is important for investors to note that although the fund tracks this customised NGRN index, it actually benchmarks its performance against the all share index (Alsi). The NGRN index has been developed by Nedbank corporate and investment banking in line with its green principles and commitment to preserving the environment, and in response to increased demand from environmentally conscious investors. The index consists of a selection of stocks from the 100 largest South African companies on the JSE. Constituents are selected and weighted based on both environmental and liquidity criteria. Environmental credentials are assessed with reference to the CDP and CDM project databases, as supported by the UN. The index is rebalanced in line with the quarterly review of the FTSE/JSE Africa index series. Constituent selection of the ETF is reviewed regularly as the CDM and CDP update their databases.

The fund relies primarily on the CDP ratings for both disclosure and performance to assess credentials of constituents. It uses an even-weighting methodology, such that the companies with the highest weightings seldom make up more than 5% of the fund. This mitigates concentration risk when compared with the fund's benchmark indices.

Risk: This is a 100% investment in equities, which is a riskier asset class than bonds or cash. It is volatile, but the returns over time should compensate for the volatility.

Fees: The total expense ratio is 0.45%. Additional costs associated with trading the ETF include bid-ask spreads and brokerage fees.

Advantages

- Easy access to some of the largest environmentally conscious companies on the JSE through one investment at a lower cost than acquiring them individually.
- Even weighting of individual constituents reduces concentration risk.
- In the long run it will theoretically outperform other major asset classes such as bonds and cash, albeit at elevated volatility.

Disadvantages

- Its benchmark, the all share index, is constructed quite differently from the fund, which inherently increases the tracking error.
- ETFs are passive instruments and do not make active bets, which is a concern in periods of poor economic activity, given that broadly, equity returns are linked to economic activity.

Historical performance

The performance described in the table below is for a lump-sum investment.

The fund has generated an annualised return of -0.7% over the past three years. The tracking error against the NGRN index is negligible whereas it has fared poorly against its official Alsi benchmark. The NGRN index is a more representative measure of fund performance as it has similar constituents to the fund. The fund has only 49 constituents compared with more than 300 companies for the Alsi.

Annualised returns before distributions and management fees @ 30 November 2015						
Investment period	BGreen ETF	FTSE/JSE all share index	NGRN index	Tracking error v Alsi	Tracking error v NGRN	
1-year	-16.4%	1.9%	-15.7	-18.3	-0.7	
3-year	-0.7%	12.3%	-0.5	-13.0	-0.2	
5-year	n.a.	16.5%	6.7%	n.a.	n.a.	

NewFunds S&P GIVI SA TOP 50

Suitability: A variation of the top 40 funds, this ETF, as the name implies, invests in the 50 biggest companies on the JSE. However, it introduces an element of fundamental analysis, by using forecasts of future earnings, then selecting those companies that appear to be trading below the value implied by those forecasts, while also screening for low volatility. The end-product is a highly diversified fund with low volatility, so it suits investors with a low appetite for risk.

What it does: From its inception to June 2015, this ETF, issued by Absa, tracked the eRAFI Overall SA Index which was made up of the top 40 SA companies ranked by fundamental valuation metrics. After the eRAFI was discontinued, the fund started tracking the S&P GIVI SA Top 50, which represents the top 50 stocks from the S&P GIVI (Global Intrinsic Value Index) SA composite index of general equities. The approach selects the stocks assessed to have the best prospects and lowest volatility, subject to certain liquidity constraints. NewFunds, the manager of the index, calculates the intrinsic value as the book value of the company, adjusted for future earnings prospects derived from the consensus forecasts of financial analysts.

Advantages: With a portfolio of 52 companies that operate across the various sectors of the economy, the NewFunds S&P GIVI SA Top 50 is one of the more diversified pure equity ETFs on the market. Additionally, the intrinsic value weighting it uses has advantages for constructing a portfolio over the market-cap approach. Because the fund gives more weight to counters that have lower volatility, it also reduces the return variability.

Historical performance: The fund's performance depends on how you choose to invest – through a single lump-sum payment or regular instalments. A lump-sum investment mimics the index performance more closely and the performance report in the table below is for a lump-sum investment. The change in the underlying index starting from 1 June 2015 from eRAFI to S&P GIVI SA Top 50 resulted in drastic changes to the portfolio's constituents. Most resource stocks were screened out of the top 10, which ended up being dominated by consumer stocks. Because of this, the fund's historical performance may not have much bearing on its future performance.

Annualised returns assuming reinvestment of dividends @ 31 March 2016			
Investment period	FTSE/JSE All Share		
	Fund	Index	Difference
1 year	7.64%	7.10%	+0.54
3 years	10.43%	12.78%	-2.35
5 years	11.55%	13.57	-2.02%

Other funds based on size of companies

Apart from top 40 ETFs discussed above, ETFs can be structured to invest in medium-sized and small companies. In SA however there are no small-cap ETFs and only one that invests solely in mid-cap stocks.

Ashburton MidCap ETF

Suitability: The Ashburton MidCap ETF (formerly RMB) is ideal for investors with a long-term investment horizon (more than five years) who can tolerate short-term but relatively elevated volatility. The ETF provides exposure to the JSE's 60 biggest companies after the top 40.

Empirical studies show that the mid-cap stocks have a higher risk profile than large caps (the JSE top 40 in SA's context), and the implication is that this risk should be compensated by relatively higher returns. Although mid-caps are positively correlated to both large- and small-cap companies, research in developed markets shows they produce better risk-adjusted returns than either. Mid-caps provide the best of both worlds: they have more robust potential growth characteristics than large-caps and less risk (and more liquidity) than their small-cap peers. Ashburton MidCap is a well-diversified portfolio containing 60 stocks which mitigates the risk to an extent.

Including mid-cap exposure in a portfolio is a proven diversifier for increasing returns while minimising risk, given their favourable risk-reward characteristics. Overall, as an equities asset class, the ETF produces above-inflation returns and performs better than bonds and cash over long periods.

What it does: The Ashburton MidCap ETF provides investors with exposure to the 41st to 100th largest companies on the JSE in terms of market capitalisation. Its returns are linked to the performance of the FTSE/JSE MidCap Index. The ETF tracks the component equities of the index in proportion to the index weightings. It pays a quarterly distribution to investors which is made up of dividends or interest earned from the underlying shares. Companies in the mid-cap index are reasonably distributed such that there is no one dominant firm, in contrast to the top 40 index which is very top heavy.

The Ashburton MidCap ETF may lend out its underlying assets against collateral. The income generated from scrip lending is applied to the fund to reduce fund expenses and there are some opportunities for investors in the ETF to lend their long exposures out in the same way.

The fund is rebalanced quarterly in line with the FTSE/JSE index rebalancing methodology.

Advantages:

- In the long run it will theoretically outperform other major asset classes such as bonds and cash
- Lower volatility than small-cap stocks
- More growth opportunities than large-cap stocks
- Well diversified with no company or companies dominating, reducing individual stock idiosyncratic risk

Disadvantages:

- Huge exposure to the stagnant SA economy coupled with a weak rand. Although some of the companies in the index have international operations, the foreign earnings contribution is small compared to the top 40 stocks.
- There is a structural cap on performance in that if a mid-cap company enjoys fantastic growth, it falls out the mid-cap index and moves into the top 40.

Risk: This is a 100% investment in equities, which is a riskier asset class than bonds or cash. It is volatile, but the returns over time should compensate for volatility. The sectoral diversity of the constituent companies does diminish the risk to a degree.

Fees: The total expense ratio is 0.68%, where 0.50% goes to management fees. The balance goes to cover trust and custody fees, auditor fees and other operational expenses. Additional costs to investors associated with trading the ETF include bid-ask spreads and brokerage fees.

Historical performance: The performance of an investment in the Ashburton MidCap ETF depends on the method used to invest. If it is a lump-sum investment, it will closely mimic the ETF performance. However, investing through regular instalments will see the performance lag the ETF, according to historical evidence, and the pattern is apparent in other ETFs too. The performance described in the table below is for a lump-sum investment.

Annualised returns before distributions and management fees @ 30 April 2016			
Investment period	RMB MidCap	FTSE/JSE MidCap Index	Difference
1 year	4.28%	4.64%	-0.36
3 years	14.16%	14.91%	-0.75
5 years	n.a.	15.09%	n.a.

Alternatives: There are no other ETFs on the JSE which track the mid-cap index.

Sector-focused funds

Specialist funds that invest in the main subsectors of the JSE, financials, industrials and resources, can be extremely useful for building a portfolio or adding to a core portfolio in the quest for higher returns. For example, if the manufacturing sector is in a healthy state, an investor could add an industrial-based ETF to an existing portfolio. There are also ETFs that invest solely in property, all of which could form a well-diversified equities portfolio, though property is often thought of as an asset class on its own.

The next three notes look at ETFs that specialise in the three main subsectors of the JSE – financials, resources and industrials. We then look at a property fund.

NewFunds S&P GIVI SA Financial 15

Suitability: The idea behind subsector funds is that they allow you to fine tune your exposures depending on your views of the likely prospects for different sectors. They can also be “building blocks” to assemble a portfolio with different sectors weightings from those found in broader diversified portfolios. These funds suit more active investors who want to take a view on the prospects for different segments of the economy. For less active investors, a broader fund with wider exposures is probably more appropriate, such as the NewFunds Swix 40 and the Satrix Divi.

Absa's NewFunds S&P GIVI SA Financial 15 is one of two ETFs listed on the JSE which provide exposure to the financial sector, the other being the Satrix FINI. They use different approaches. The NewFunds ETF is weighted by intrinsic value, and intrinsic value is derived from projected future cash flows, which the fund issuer calculates. The ETF invests in the 15 financial companies with the best projected cash flows and the lowest volatility. The Satrix fund invests in the 15 biggest financial companies according to their market capitalisation (excluding locked-in shares such as those held by promoters, founders and governments). The NewFunds ETF therefore is similar to a more actively managed fund in which a fund manager takes active decisions based on their view of prospects for companies while the Satrix fund is passive in tracking the index.

What it does: The fund replicates the price performance of the S&P GIVI SA Financials Index, an index which represents 15 stocks from the S&P GIVI SA composite, constructed using GICS financials sector classification (see below for a key to this alphabet soup). The approach favours counters with the highest intrinsic value and lowest volatility, subject to certain liquidity constraints. However, the maximum weight of each stock in the index is capped at 30%.

Here is what the acronyms stand for:

- GIVI stands for Global Intrinsic Value Index
- GICS means Global Industry Classification Standard. It is a globally accepted asset classification methodology (a way of deciding whether a stock is a “financial” or “industrial” for example)

developed in 1999 by Morgan Stanley Capital International (MSCI) and Standard & Poor's (S&P).

Advantages: Because the fund uses intrinsic value as a determining factor for its investments, it means it is forward-looking, based on the expected performances of each company. We think this is a more robust way to construct a portfolio than the market-cap approach. And because it gives more weight to counters that have lower risk (low volatility), it also somewhat limits the potential loss of capital.

Disadvantages: Although it tries to limit the idiosyncratic risk of individual assets by capping them at 30% of the portfolio, we think the cap is too high and performance of the fund could potentially be skewed by one asset. However, the fund's weightings do not reflect this.

Risk: There are two important risks to think about. First, the fund is concentrated in one broad sector and all companies are very responsive to similar risk factors. It is important therefore that this ETF forms part of a portfolio's wider equity holdings that also include other sectors such as an industrial stocks. Second, it is an all-equity investment which is more volatile than other asset classes such as bonds and cash.

Fees: The total expense ratio is 0.12%. This excludes brokerage and transactional costs.

Historical performance: The fund's performance depends on the method used to invest. A lump-sum investment closely mimics the index performance. However, investing through regular instalments usually lags the performance of the index, according to historical evidence, and the pattern is apparent in other ETFs too. This supports the need to invest for longer periods when it comes to equities. The performance described in the table below is for a lump-sum investment.

Annualised returns before distributions and management fees @ 31 March 2016			
Investment period	Fund	Benchmark	Tracking error
1 year	-4.40%	-3.64%	-0.76
3 years	14.74%	15.67%	-0.55
5 years	19.55%	18.81%	+1.94
Since inception	13.55%	13.30%	+0.25

NewFunds S&P GIVI SA Resource 15

Suitability: The second specialist fund is focused on the resources sector, which has been through a rough time over the past few years as commodity prices have plummeted. This ETF is for investors who can stomach some volatility and already have a diversified portfolio (one that already includes other equity holdings, cash and bonds). ETFs that invest directly in a single commodity such as platinum are not permissible under the tax-free savings account framework in SA so these diversified funds invested in mining companies are the best way to get exposure to the commodities cycle using a tax-free account.

There are two funds you can use: the NewFunds S&P GIVI SA Resources 15 ETF and the Satrix Resi ETF. We prefer the NewFunds S&P GIVI SA because it weights 15 resource stocks based on their prospects while the Satrix Resi invests in the 10 biggest according to their market capitalisation, irrespective of prospects.

The funds give concentrated exposure to commodities companies, unlike diversified funds such as those that track the top 40 index, specialist fund constituents are likely to move in the same direction. While this is a plus during a commodity boom it can result in larger capital losses in the case of a cyclical downturn.

What it does: The ETF replicates the price performance of the S&P GIVI SA Resources Index, which represents the top 15 resource stocks from the S&P GIVI (Global Intrinsic Value Index) SA composite index of general equities. The approach selects resource counters with the highest intrinsic value and lowest volatility, subject to certain liquidity constraints. However, the maximum weight of each stock in the index is capped at 30%. "Intrinsic value" is defined as the book value of the company adjusted for future earnings prospects derived from consensus forecasts of financial analysts.

Advantages: We think the intrinsic value weighting is a more robust way to construct a portfolio than the market-cap approach. And because it gives more weight to counters that have lower risk (low volatility), it also somewhat reduces the risks involved.

Risk: There are two important risks to consider. First, the fund is concentrated in one broad sector and all companies respond to similar risk factors. It is important therefore that this ETF forms part of a wider portfolio that includes other sectors. Second, it is an all-equity investment which is more volatile than other asset classes such as bonds and cash.

Fees: The annualised total expense ratio which excludes brokerage and transactional costs for this fund is 0.16%.

Historical performance: The fund's performance depends on how you choose to invest – through a single lump-sum payment or regular instalments. A lump-sum investment mimics the index performance more closely. The performance report in the table below is for a lump-sum investment. The NewFunds S&P GIVI Resources 15 has outperformed the JSE Resources 20 Index since inception, which shows the impact of the forward looking approach to weightings.

Annualised returns assuming reinvestment of dividends @ 31 March 2016			
Investment period	Fund	FTSE/JSE Resources 20 index	Difference
1 year	68.85%	-27.8%	+41.05
3 years	15.82%	-12.65%	+3.17
5 years	8.4%	10.0%	-1.6

The large tracking error is because the fund tracks a different index to benchmark reflected in this table.

Alternatives: Its closest peer is the Satrix RESI ETF which is weighted according to the market capitalisation of each company. Satrix Resi is more expensive with an annual TER of 0.45%.

Other options are single-commodity ETFs. These invest directly in one commodity, bypassing the mining companies. For example, the Absa NewGold ETF invests in gold bullion debentures which are backed by physical gold. It is a way to invest in gold without having to invest in the mining companies that produce it. However, these are not allowed in tax-free savings accounts.

NewFunds S&P GIVI SA Industrial 25

Suitability: This is the third specialist fund, and invests solely in industrials.

Industrials are much broader than the other two sectors and cover a range of disparate industries which do not respond uniformly to the same set of external factors such as interest rates or commodity prices. That lowers the risk profile of industrial sector funds. Whereas financials and resources are suited to more active investors wanting to take bets on the prospects of specific segments of the economy, industrials suit a semi-active investor who can tolerate the volatility of equities.

Absa's NewFunds S&P GIVI SA Industrial 25 ETF is one of two JSE-listed ETFs that give you exposure to the industrial sector. The other is the Satrix INDI. The NewFunds ETF selects industrial companies assessed to have the highest "intrinsic value" with low volatility while the Satrix INDI selects the biggest companies based on market capitalisation (share price multiplied by the number of shares issued).

What it does: The NewFunds S&P GIVI SA Industrial 25 ETF replicates the price performance of the S&P GIVI SA Industrials Index, which represents 25 industrial stocks with the highest intrinsic value and lowest volatility, subject to certain liquidity constraints. "Intrinsic value" is defined as the book value of the company adjusted for future earnings prospects derived from consensus forecasts of financial analysts.

It rebalances the fund and pays dividends every quarter. If your trading account is held in a tax-free savings account, the dividend is untaxed.

Advantages: The fund construction approach provides potential for the ETF to outperform its benchmark.

Disadvantages: The fund weights its constituents by intrinsic value (defined above) so its performance differs quite considerably from the Indi25 index. However, its peer fund, Satrix INDI, uses the same weighting approach as the performance benchmark. In practice this means there is less diversity in NewFunds relative to Satrix.

Risk: As with all equity investments, the fund is more volatile than other asset classes such as bonds and cash, but a relatively higher return should compensate for the elevated risk over time.

Fees: The annualised total expense ratio is 0.13%. This excludes brokerage and transactional costs.

Historical performance: The fund's performance depends on the method used to invest. A lump-sum investment closely mimics the index performance. However, investing through regular instalments usually lags the performance of the index, according to historical evidence, and the pattern is apparent in other ETFs too. This supports the need to invest for longer periods when it comes to equities. The performance described in the table below is for a lump-sum investment.

Note that the NewFunds ETF uses the FTSE/JSE Industrial 25 index for benchmarking its performance, even though it tracks its own S&P GIVI SA Industrials Index. This is the reason for the big disparity between the ETF's returns and that of the Indi25 in the table below.

Annualised returns before distributions and management fees @ 31 March 2016					
Investment period	NewFunds	Satrix INDI	FTSE/JSE Industrial 25 Index	Performance against FTSE/JSE Indi25	Tracking error: Satrix INDI
1 year	15.08%	4.0%	10.49%	+4.59	-6.49
3 years	18.96%	19.96%	21.15%	-2.19	-1.19
5 years	19.62%	22.56%	25.53%	-5.91	-2.97
Since inception	14.78%	19.86%	17.24%	-2.46	+2.62

Alternatives: We have covered its closest peer, the Satrix INDI, in some sections of this note. This ETF is weighted according to market capitalisation but excludes locked-in shares such as those held by promoters, founders and governments.

CoreShares PropTrax SAPY

Suitability: The CoreShares PropTrax SAPY, managed by Grindrod, is one of the few listed exchange-traded funds offering retail investors exposure to the commercial property market. Real estate assets have two useful sources of return: rentals that escalate annually and appreciation of the value of the property itself. Investors benefit from a high dividend yield and their role as a portfolio diversifier.

This makes CoreShares PropTrax SAPY suitable for a long-term (more than five years) investors seeking to diversify a core portfolio but also wanting a steady flow of income. While property stocks are generally regarded as a separate asset class, they are still equities and should not be used as an alternative to low-risk fixed income investments. Over the past 10 years property stocks have been about 5% more volatile than the all share index.

What it does: CoreShares PropTrax SAPY tracks the FTSE/JSE South African Listed Property Index (JSE SAPY) by holding constituent securities in the same weightings as they have in the underlying index. It provides returns linked to the performance of the SAPY in terms of both price performance and income. The FTSE/JSE SAPY Index was designed to capture the top 20 liquid property companies but due to a number of concerns from market participants, the JSE is considering revising this index and other property-related indices. The exercise is likely to result in a number of changes to the underlying constituents.

Advantages: Through a single investment, CoreShares PropTrax SAPY provides exposure to SA's top listed commercial real estate at a low cost. Another attraction is its high dividend yield of 5.4%.

Disadvantages: With a total expense ratio of 0.57%, CoreShares PropTrax SAPY is more expensive than its closest competitor, STANLIB SA Property ETF, which charges 0.37%. Growthpoint Properties and Redefine Properties account for 38% of the fund, creating concentration risk – the performance of the fund will be biased towards the performance of these two stocks. Also, the majority of the stocks at the tail of the JSE SAPY index lack trading liquidity, which increases tracking risk.

Risk: Unlike most ETFs which usually invest in a diversified pool of assets or stocks, the CoreShares PropTrax SAPY invests solely in property stocks. This pure SA real estate market exposure makes it riskier than other non-specialist ETFs on the market and should be used to complement a core portfolio. But by the same token it has potential for higher returns.

Fees: Total expenses take 0.57% from the fund each year.

Historical performance: Property stocks have outperformed most of SA's traditional equity and bond benchmarks for some time now. CoreShares PropTrax SAPY benefited from this strong performance in property stocks, returning 19.8% over the past five years.

Annualised returns to end-March 2016 (assuming reinvestment of dividends)			
Investment period	CoreShares		
	PropTrax SAPY	SAPY Index	Divergence
1 year	5.6%	4.6%	+1.0
3 years	14.4%	14.4%	0
5 years	19.0%	19.8%	-0.8
Since inception	14.6%	15.4%	+0.8

Alternatives: Retail investors seeking exposure to property stocks have two other options: CoreShares PropTrax SAPY Ten Minimum managed by Grindrod Asset Management and Stanlib SA Property Exchange Traded Fund.

The Stanlib SA Property ETF tracks the JSE SAPY index in a similar fashion to the CoreShares PropTrax SAPY. With over R9.2bn of assets under management the fund is by the far the largest in the sector. It also offers the cheapest exposure with a total expense ratio of 0.37%.

Investors can also get property exposure through the CoreShares PropTrax SAPY PropTrax Ten Minimum. This ETF differs from the other two discussed above in that it tracks the FTSE/JSE SAPY Top 10 equal index. It holds the top 10 companies in SAPY in equal weightings of 10% each. While it won't be as diversified as the other two it certainly caps investments in Growthpoint and Redefine.

Also, by investing only the top 10 property companies, its underlying index is likely to be more liquid. It has a total expense ratio of 0.55%.

Multi-Asset Funds

The next category of ETFs we assess are multi-asset funds. These invest in a mix of equities, bonds and cash. The percentage allocations to each asset class are made according to risk levels. For aggressive portfolios, the exposure to equities will be higher while conservative portfolios will invest more in bonds.

NewFunds MAPPS Growth ETF

Suitability: The NewFunds MAPPS Growth and MAPPS Protect ETFs are the only listed exchange-traded funds on the JSE that provide exposure to a diversified mix of asset classes in one portfolio. That makes them a good option for investors looking for diversified portfolios that could form the core of an investment strategy.

Other than these two ETFs, investors wanting to create a diversified portfolio have three options. The first is to buy unit trusts. This method is likely to be more expensive than ETFs because the majority of such funds are actively managed. Investors could also build their own mixed-asset portfolios, but that requires time and expertise. The third option is to invest in different single-asset class ETFs, but again this is unlikely to yield an optimal solution.

NewFunds' multi-asset ETFs address the weaknesses of the above methods. They bundle the various asset classes into a single investment, sparing investors the administrative burden in a cost-efficient way. MAPPS Growth, our focus here, is designed to provide greater exposure to domestic equities, making it more suitable for younger investors who are willing to accept higher variability of returns in the short term in exchange for the prospect of better returns over the long term. The fund's asset allocation complies with pension regulations so it can also be used to supplement retirement savings. With a dividend yield of 3.4% we think it is also suitable for income seekers.

What it does: NewFunds MAPPS Growth replicates the total return performance of South African equities through the SWIX 40 index. It replicates nominal bonds through the GOVI index and inflation-linked bonds through ILBI index. The cash component is held in hard cash or allowable money market instruments. The portfolio targets the following asset allocation: equities 75%; nominal bonds 10%; inflation-linked bonds 10%; and cash 5%. It may however deviate from that between rebalancing periods that are done on a quarterly basis.

Advantages: The main attraction of this ETF is that it provides an inexpensive way of accessing a well-diversified portfolio. It is diversified across asset classes and is further diversified through the underlying investments in a range of securities within each asset class.

The Swix top 40 index adjusts the regular JSE top 40 index to eliminate foreign holdings and cross-holdings of the constituent companies. Because of that, the weightings of constituents in the MAPPS Growth portfolio are fairly even when compared to the JSE top 40 index

Risk: Because of its diversity the ETF is considered to carry moderate risk over the medium to long term. The value of the ETF will rise and fall, tracking the underlying securities and as such investors' capital is not protected. In our study of the local ETF market, we found that these multi-asset ETFs were more volatile than some of the single-asset class ETFs.

Fees: Despite having to track over 63 securities, which makes it one of the most diversified of funds, MAPPS Growth has a reasonable total expense ratio. It charges an average of 33c/year for every R100 invested.

Historical performance: MAPPS Growth's historical performance has been solid, outperforming a number of single-asset class ETFs.

Annualised returns to end-March 2016			
Investment period	NewFunds MAPPS Growth	MAPPS Growth Index	Divergence
1 year	2.19%	2.56%	-0.37
3 years	11.42%	11.82%	-0.4
4 year	13.3%	13.61%	-0.31

Alternatives: For more conservative investors, especially those nearing retirement, the NewFunds MAPPS Protect ETF might be a good alternative. MAPPS Protect allocates 40% to domestic equities, 15% to SA government bonds, 35% to SA inflation-linked bonds and 10% to cash. With this ETF, bonds have a much higher contribution, which reduces volatility in the overall portfolio.

Fixed Income Funds

Bond ETFs are a good way of introducing bonds to your portfolio. Asset allocation strategies involve allocating a portion of a portfolio to different asset categories such as equities, bonds and cash. The allocations depend on your investment time horizon and risk tolerance, but as a rule of thumb young investors should allocate more to equities while investors at a later stage of their careers should have portfolios weighted more to less risky assets such as bonds and cash. Some investors also use bonds in order to ensure they receive income, as many pay out a regular coupon.

Traditionally fixed income funds suit investors needing regular income from a portfolio's returns. However, many ETFs in this category are total return funds, meaning that they reinvest dividends, interest and bond coupon payments. On the JSE, the RMB Inflation-X ETF does distribute income to unit holders while others, such as the NewFunds ILBI ETF which we look at below, reinvest the proceeds.

Fixed income funds also cover cash investments and we also assess an ETF that invests in money market instruments, the NewFunds TRACI 3-Month ETF.

Ashburton Inflation-X ETF

Suitability: This fund invests in government-issued bonds that pay interest linked to inflation. Out of the three ETFs that provide exposure to local bonds, Ashburton Inflation-X (formerly RMB) is the only fund that pays dividends to unit holders. The other two alternatives – New Funds Govi and NewFunds ILBI – are total return funds, meaning they automatically reinvest the coupons. RMB Inflation-X therefore suits investors who require consistent income that is protected in real terms.

What it does: The Ashburton Inflation-X ETF aims to track the performance of the government inflation-linked bond index (GILBx). GILBx is a weighted basket of South African government inflation-linked bonds.

Advantages: The main attraction of bonds as an asset class is their low correlation with stocks. Over the past decade, the JSE's all bond index has had a lowly correlation factor of 0.13 with the all share index. Because the ETF is inflation protected, the initial amount invested will increase in line with inflation while real distributions are paid out.

Disadvantages: The fund is designed to replicate the performance of the GILBx and does not make active bets relative to sectors, duration or credit quality. It is also restricted to certain government bonds, thus excluding corporate bonds and other issues by state-owned institutions such as Eskom and Sanral.

Risk: The most common risks associated with fixed-income securities are inflation risk, credit risk and interest rate risk. However, because all of this ETF's constituents are inflation-linked sovereign

bonds issued by the SA government, they do not have inflation risk and credit risk is minimal. Interest rate risk arises from fluctuating interest rates. As interest rates rise, bond prices fall and vice versa. The GILBx index has a high modified duration of 12.3 years, so its interest rate sensitivity might be considered to be fairly high. That means the value of the ETF will fall 12.3% for every one percentage point increase in interest rates.

Fees: RMB Inflation-X ETF has a total expense ratio (TER) of 0.45% which is within range of the average of the JSE's ETF market.

Alternatives: Retail investors seeking exposure to bonds have two other options: NewFunds ILBI and NewFunds Govi, both issued by Absa.

NewFunds ILBI ETF tracks the Barclays Capital/Absa Capital South African government inflation-linked bond total return index of eight RSA inflation-linked bonds. All coupons received are automatically reinvested to provide a total return product. Inflation-linked bonds have an interest rate (coupon) calculated as a function of the inflation rate. The product has an expected TER of 0,28% a year.

NewFunds Govi ETF is also a total return product but tracks the performance of the SA government bond total return index (Govt). This index consists of bonds issued by the South African government, including only those issues in which National Treasury obliges the primary dealers to make a market. The TER of 0,24% a year makes it the cheapest in the category.

NewFunds ILBI (inflation-linked bond index) ETF

Suitability: The NewFunds Inflation-linked bond index (ILBI) ETF is a total return index so it doesn't pay any cash dividends. On a monthly basis coupons received are reinvested into the fund, increasing the net asset value of the portfolio and consequently increasing the value of each unit. It suits investors needing a core long-term bond holding to reduce risk in their overall portfolio.

What it does: The ETF aims to track the performance of the Barclays\Absa South African government inflation-linked bond index (ILBI). ILBI is a weighted basket of South African government inflation-linked bonds. The ETF tracks the component bonds of the index in proportion to the index weightings.

Advantages: The main attraction of bonds as an asset class within an investment portfolio is their low correlation with shares. And because the ETF is inflation protected, the initial amount invested will increase in line with inflation while also benefiting from returns in excess of inflation.

Disadvantages: The fund is designed to replicate the performance of the ILBI and does not make active bets relative to sectors, yield curve or credit quality. It is also restricted to certain government bonds, thus excludes corporate bonds and other issues by state-owned enterprises such as Eskom and Sanral.

Risk: The most common risks associated with fixed-income securities are inflation risk, credit risk and interest rate risk. However, because all of this ETF's constituents are inflation-linked sovereign bonds issued by the SA government, they do not have inflation risk and credit risk is minimal. Interest rate risk arises from fluctuating interest rates. As interest rates rise, bond prices fall and vice versa.

Fees: NewFunds ILBI ETF has a total expense ratio (TER) of 0.28%.

Historical performance

Since its establishment in 2012, the fund has recorded AN annualised return of 5.58%.

Annualised returns to end-January 2016			
Investment period	NewFunds ILBI ETF	ILBI index	Divergence
1 year	4.12%	4.51%	-0.39%
3 years	5.22%	5.54%	-0.32%
Since inception	5.58%	5.80%	-0.22%

NewFunds TRACI 3 Month ETF

Suitability: This ETF is a low-risk, cash-based investment portfolio. It would suit investors who want to avoid the risks typically associated with more volatile asset classes such as shares and want to protect their capital as a priority. The NewFunds Traci is the only listed ETF in SA to invest in the money market. It aims to give investors exposure to a portfolio of three-month bank deposits issued by SA's largest banks. In theory, the ETF's risk should be lower than that of bonds, stocks and commodities. This feature, coupled with the fact that it can be traded on the JSE, makes it appealing for conservative investors seeking low-cost and liquid alternatives to traditional cash-based investments such as fixed deposits. This ETF would work well as the cash tranche within a multi-asset portfolio.

What it does: The Traci fund tracks the total return version of the Barclays/Absa Tradable Cash index (Traci 3-month). The index is constructed to track the overnight, three-month SA money market deposit rate. The TRACI index measures the mark-to-market value (quoted price in an active market) of the income earned from rolling a 3-month money market deposit on a monthly basis. Interest received is reinvested into the fund so as to increase the net asset value of each unit.

Advantages: The ETF is a good option for retail investors who might not have the R1m normally required to invest in negotiable certificates of deposit. Negotiable CDs usually offer higher yields than traditional call deposits or savings accounts. Additionally, the fund's diversified portfolio reduces the credit risk that unit holders are exposed to. Absa acts as a market maker, making it easy for unit holders to buy or sell the ETF.

Risk: Due to the fact that an investment in a negotiable certificate of deposit must be in multiples of R1m, The ETF will, from time to time have residual cash. Such residual cash will be invested in a lower-return call deposit account, reducing the fund's ability to closely track its benchmark. While default on NCDs is very rare, they still have credit risk.

Fees: NewFunds Traci charges about 20c/year for every R100 invested in the fund making it the cheapest fund on the market with a 0.2% total expense ratio.

Historical performance

The fund has performed well over the past three years, outperforming some bond and equity ETFs.

Annualised returns to end-March 2016			
Investment period	NewFunds Traci 3 month	TRACI index	Divergence
1 year	6.20%	6.23%	-0.03
2 years	6.0%	6.03%	-0.03
3 years	5.67%	5.70%	-0.03

Dividend funds

We now move our focus to funds that are designed to serve a specific investment purpose. Dividend ETFs invest in companies that pay regular dividend yields. Dividend funds are useful to people requiring a regular income, but with some funds the dividends can also be reinvested, which can provide a significant boost to a portfolio over the long term. Dividends are also less volatile than earnings: companies that pay regular dividends tend to continue doing so even when performance lags. So such companies tend to be established ones that can ride out difficult markets conditions.

Satrix DIVI ETF

Suitability: This ETF invests in shares that pay high dividends. It is therefore ideal for investors willing to tolerate the higher risk implied by equities but who also need a flow of income that comes from dividends. The ETF is based on an index of high dividend paying stocks. These tend to be larger, mature companies that pay out cash rather than reinvesting it for growth. Such companies typically fall into the “value” classification, with low price:earnings ratios and high book values relative to market value.

What it does: The Satrix DIVI ETF tracks the price and income performance of the FTSE/JSE Dividend Plus index. All dividends received from companies in the index are paid to investors on a quarterly basis net of costs. In order to reduce costs and minimise tracking error, the Satrix Divi fund engages in scrip lending activities with Investec and Sanlam and manufactured dividends that arise are passed on to the fund investors. If you hold the ETF as part of a tax-free savings account with a stockbroker, the dividends will accumulate within the tax-free shelter, but if it is held directly the dividends will be paid in cash to investors outside of the tax-free wrapper.

The index is made up of the 30 largest listed companies included in the FTSE/JSE top 40 or FTSE/JSE mid-cap indices (excluding property companies), weighted by the one year forecast dividend yield of companies meeting certain minimum liquidity requirements. The forecast dividend yield is based on consensus forecasts provided by investment analysts to Inet BFA. The fund is rebalanced quarterly in line with the FTSE/JSE index rebalancing methodology.

Advantages

- The fund focuses on income-generating stocks providing income for investors
- It has low concentration risk, with the biggest asset representing only 5.2% of the fund
- In the long run it should, theoretically, outperform other major asset classes such as bonds and cash

Disadvantages

- The fund constitutes mostly mature companies with limited growth prospects

- The disbursement of dividends is a problem for long-term investors looking for capital growth as the cash has to be reinvested

Risk: Controversy rages in investment theory about value stocks. Naysayers argue that the value they represent is because of their low growth expectation and possible future distress. On the other hand, prominent value investors like Warren Buffett argue that low valuations present significant upside potential. This is a 100% investment in equities, a riskier asset class than bonds or cash, but over time a relatively higher return should compensate for volatility.

Fees: The total expense ratio is 0.45%. The costs consist primarily of management fees and additional expenses such as trading fees and other operating expenses.

Historical performance

The performance of an investment in the Satrix DIVI ETF depends on the method used to invest. A lump-sum investment will mimic the ETF performance. However, investing through regular instalments will see the performance lag the ETF, according to historical evidence, and the pattern is apparent in other ETFs too. The performance described in the table below is for a lump-sum investment.

The fund returned an annualised negative 1 year return of about 8% while its 3 years and five year returns, although positive, have lagged the inflation rate. So it has performed poorly as an inflation hedge.

Annualised returns before distributions and management fees @ 31 December 2015			
Investment period	Satrix DIVI	FTSE/JSE Div Plus	Tracking error
1 year	-7.98%	-7.55%	-0.43
3 years	4.83%	5.42%	-0.59
5 years	8.69%	9.37%	-0.68
Since inception (Oct 2007)	10.13%	10.82%	-0.6p

Alternatives: A close peer is the CoreShares S&P South Africa Dividend Aristocrats fund which is also constructed based on dividend payments. It tracks S&P South Africa Dividend Aristocrats Index, which measures the performance of JSE stocks that follow a policy of increasing or maintaining stable dividends for five consecutive years. This is a young fund and has provided an annualised return of 17.2% since its launch in April 2014.

Offshore funds

A core part of any South African portfolio should have a strong offshore component, not only to serve as a hedge against the volatile rand but also to gain exposure to growth in foreign markets. Also, offshore markets are often much more diverse than the local market, so bring diversification benefits to a portfolio. ETFs provide an efficient, extremely cheap way to invest offshore without affecting your exchange control limits. Deutsche Bank is the only issuer so far to list ETFs in SA for local investors.

db X-tracker MSCI World Index ETF

Suitability: If you are an investor seeking rand-hedge developed market exposure through a well-diversified equity portfolio at low cost, then the db X World ETF is highly suitable. It is an ideal choice for investors with a long-term (more than five years) investment horizon who can tolerate short-term volatility. It provides exposure to the performance of 23 developed markets (including the US, Europe, Japan, Australia and Canada). It therefore provides a hedge against rand weakness and a mechanism to diversify your portfolio exposure globally. It is the broadest international ETF available in SA and has lower costs than equivalent actively managed funds. Investing in this ETF does not affect any exchange control limits as it is rand settled. Allocating some of a portfolio to offshore exposures using an instrument like this is a good idea to achieve portfolio diversity.

What it does: The ETF tracks the price and yield performance of the MSCI world index by holding a portfolio of securities in the same proportion as the basket of securities that make up the index. Essentially, an investment in this ETF tracks the developed world's equity markets. The index is a free float-adjusted market capitalisation index that is designed to mimic the equity performance of 23 developed markets, representing large- and mid-capitalisation companies with a total market capitalisation of \$30-trillion. A free-float adjusted market capitalisation format is based on the market capitalisation of each company excluding locked-in shares such as those held by promoters, founders and governments. The weightings of each investment of the ETF are in proportion to the value of available shares for that company. The index is reviewed quarterly (in February, May, August and November) with the objective of reflecting change in the underlying equity markets in a timely manner, while limiting the costs incurred by index turnover. During the May and November reviews, the index is rebalanced.

Advantages: The ETF offers easy access to companies on various developed world stock exchanges through one investment at a low cost. Most companies are multinationals with business interests span various continents, generating earnings in multiple currencies. The rand's severe depreciation over the past few years means the foreign currency return component of this instrument has been substantial.

Disadvantages: The ETF has a disproportionate exposure to the US market, with 59% invested in US-domiciled companies. Therefore, US macroeconomic developments have a pronounced effect on the fund's performance. However, it is well diversified at individual asset holdings level, with its biggest investment in Apple constituting only 2.1% of the fund, which mitigates the risk.

Risk: This is a 100% investment in equities, which is a riskier asset class than bonds or cash. It is likely to be volatile, but the returns over time should compensate for volatility. We think the sectoral, geographical and currency diversity of the constituent companies diminishes the risks to a degree.

Fees: Fees take a total of 0.68% out of fund's returns each year, a comparatively low cost. For every R1 000 invested, R6.84c goes to fees. This ETF offers the lowest fees in its category. Additional costs to investors associated with trading the ETF include bid-ask spreads and brokerage fees.

Historical performance

The db X World holds up well against its peers. Over the past five years the fund had an annualised return of nearly 22%, of which nearly 17% was due to foreign currency returns.

Annualised returns before distributions and management fees @ 31 October 2015			
Investment period	db X World	MSCI world index	Divergence
1 year	15.12%	15.28%	-0.16
3 years	19.78%	19.79%	-0.01
5 years	21.97%	21.99%	-0.02
Since inception (April 2008)	9.22%	9.27%	-0.05

Alternatives: Because there are no other ETFs which track the MSCI world index listed on the JSE, the next logical alternatives would be ETFs that track stocks listed on various developed markets. There are a number of developed market index trackers.

Db X tracker USA tracks the US MSCI index of around 600 major US listed securities. We found that returns between db X World and db X USA were highly correlated over the past five years. Although db X World's performance was slightly inferior, it has the lowest fee structure. The high correlation can be explained by the fact that db X World holds 59% of US stocks.

Db X tracker Euro tracks the EuroStoxx 50 index, one of the most widely known European blue chip indices. The index contains the 50 most liquid blue chip stocks from countries within the eurozone.

Other trackers are db X Japan and db X UK. The former tracks the MSCI Japan index of 400 major Japanese companies, while the latter tracks the FTSE 100 index of the 100 largest UK securities. However, these two are not highly correlated with db X World because they are more limited geographically and in asset holdings.

All the alternatives have a similar fee structure of about 0.86%.

Other specialist funds

There are a few other ETFs on the JSE with a specific purpose. Some invest in a single commodity, such as the Standard Bank Africa Gold ETF or the Absa NewPlat ETF. However, these are not allowed in a tax-free savings account. Others follow a specific investment strategy (eg, momentum stocks/low volatility stocks) or are based on ethical investment principles (eg, investing in environmentally friendly companies or those with high black empowered ratings). We discuss some of these below.

NewFunds Equity Momentum ETF

Suitability: The fund utilises share price momentum, which refers to the trajectory of share prices on the JSE. It invests in the JSE's 40 largest stocks, but upweights those stocks that are increasing in price and downweights those stocks that have been declining. It backs winners and avoids losers.

Momentum is an investment strategy that has been both advocated and criticised by financial theorists. Some studies show that momentum strategies do outperform the general market over the long run. Generally this is explained by reference to behavioural biases – that investors tend to back winners and avoid losers based on recent price performance, so adding momentum to price movements. On the other hand, momentum investing is criticised as “selling low and buying high” which naturally underperforms. The evidence suggests that the longer the holding period, the more likely the strategy does outperform; however there are shorter periods in which it does not.

So this fund should only be considered by investors with a long-term horizon, or a short-term view that market trends are going to hold for a definitive period during which they will be invested.

What it is: Price momentum investing is buying assets whose prices have been climbing and selling those that have been falling. The fund's strategy is referred to as “smart beta” because it is different from the usual pure index investing represented by most of the listed ETFs which utilise market cap weightings.

What it does: The Equity Momentum ETF tracks the performance of the Barclays Capital/Absa Capital South Africa Equity Momentum index. It is a total return index which aims to capture returns from the short-term price momentum among the 40 biggest companies on the JSE. Holdings are ranked by their relative price momentum over the assessment period, with the index being rebalanced quarterly. Shares with higher price momentum are given higher weightings and any stocks with negative price momentum are sold off. As such the index usually has fewer than 40 stocks.

Distributions are reinvested in the ETF on an after-tax basis. However, if an investor holds the ETF as part of a tax-free savings account, the dividends will accumulate within the tax-free wrapper.

Advantages: It offers investors an opportunity to earn above-average short-term investment returns provided the observed price momentum persists into the future.

Disadvantages: The major drawback is that investment decisions are not based on the fundamental value of a company but on historical price movements which may not continue into the future.

Risk: The fund is constructed based on observing short-term price movements of stocks which may not persist. The fund is susceptible to being overweight in stocks that have had a hard run but investors are about to start selling. However, the risk is mitigated by the fact that the asset pool is limited to JSE's top 40 blue-chip companies, which are always within an investor's radar.

Fees: The total expense ratio is 0.35%. However, there are additional costs associated with trading the ETF which include bid-ask spreads and brokerage fees.

Historical performance: The fund's performance depends on the method used to invest. A lump-sum investment mimics the index performance. However, investing through regular instalments usually lags the performance of the index, according to historical evidence, and the pattern is apparent in other ETFs too. The performance described in the table below is for a lump-sum investment.

The fund has generated an annualised return of 10.7% over the past three years. However, the fund has got a relatively high tracking error compared with other listed ETFs.

Annualised returns before distributions and management fees @ end-March 2016			
Investment period	Equity momentum		
	ETF	Benchmark index	Tracking error
1 year	-5.97%	-5.04	-0.93
3 years	10.61%	12.46%	-1.85
Since inception (Jan 2013)	9.99%	11.24%	-1.25

Alternatives: There are no other ETFs which follow the proprietary benchmark index created by Absa for its momentum fund.

CoreShares S&P South Africa Low Volatility

Suitability: This ETF that invests in equities but boasts low volatility, reducing the risk profile. By default, it has a two-stage screening process (explained below). Any stock that winds up in the fund first has to pass the S&P SA Composite Index criteria as well as the S&P SA Low Volatility Index methodology. As such the fund is composed of assets that meet stringent yardsticks for liquidity, market capitalisation and volatility. So the fund inherently has low volatility, which diminishes its relative risk profile while still exposing an investor to the potential high returns associated with equity investments. Boosting the fund's attractiveness are empirical studies that show that high volatility stocks tend to underperform. This fund, therefore, should suit people who can stomach some degree of risk due to the equity exposure, to use as part of their core long-term portfolio.

What it does: The CoreShares S&P South Africa Low Volatility ETF tracks the price and yield performance of the S&P SA Low Volatility Index (volatility index). As mentioned, the fund has two screening stages. First, all JSE companies are subjected to the S&P SA Composite Index screening. From those that pass the composite test, the 40 least volatile stocks are used to make up the S&P SA Low Volatility Index.

The composite index consists of all JSE-listed companies with significant SA operations that meet certain minimum liquidity and market capitalisation requirements. The market cap is adjusted for stocks held by company sponsors, founders and the government. The volatility index is then made up of the 40 least volatile stocks from the composite index, based on their one year trailing standard deviation. Standard deviation is measured as a security's daily price returns variability over the past year. These low-volatility stocks are then weighted by the inverse of their volatility, ie, the company with the lowest volatility has the highest weighting and the company with the highest volatility has the lowest weighting.

In finance, volatility (as measured by standard deviation of an asset) is widely used to measure risk. The interpretation is that a low measure of standard deviation (low volatility) means the risk of an asset is low and vice versa.

Advantages: Compared with most listed ETFs which limit their universe to the JSE's top 100 or fewer stocks, this fund has a wider universe which encompasses all JSE-listed stocks (large-, mid- and small-caps) that meet the S&P SA Composite Index criteria. The fund is also well diversified with the biggest asset taking up only 3.4% of the fund. This eliminates the idiosyncratic influence of individual stocks, compared with popular market cap-weighted approaches.

Risk: This is a 100% investment in equities, which remains a riskier asset class than bonds or cash – but the fund is less volatile than other equity investments.

Fees: The annualised total expense ratio (excluding brokerage and transactional costs) is 0.41%.

Historical performance: The fund's performance depends on how you choose to invest – through a single lump-sum payment or regular instalments. A lump-sum investment mimics the index performance more closely and the performance report in the table below is for a lump-sum investment.

Annualised returns assuming reinvestment of dividends @ end-March 2016			
Investment period	Fund	S&P SA Low Volatility index	Difference
1 year	1.1%	1.6%	-0.5
Since inception (April 2014)	12.2%	13.5%	-1.2

Alternatives: There are no available listed ETFs which track the S&P SA Low Volatility Index.

Coreshares Preftrax ETF

Suitability: The CoreShares PrefTrax is the only ETF on the JSE which offers investors exposure to the pool of publicly traded preference shares. A preference share is a class of ownership in a company that has a higher claim on assets and earnings than ordinary shares, but less of a claim than debt. They generally have a dividend that must be paid out before dividends to ordinary shareholders.

Preference shares are regarded as hybrid instruments as they share similar characteristics with both debt and equity. In SA, a dividend withholding tax of 15% is paid on dividends earned from preference shares, giving them a tax advantage over bonds and money market instruments which are taxed at the marginal income tax rate of the taxpayer once the interest exemption of R23,000 a year is used up. However, in a tax free account both returns should be tax free. Outside of a tax free account, this tax advantage makes CoreShares PrefTrax shares appeal mainly to high net worth, income-focused investors. Share capital appreciation is limited, so when investing in this ETF your main aim should be to generate income over a long period.

What it does: CoreShares PrefTrax tracks the FTSE/JSE preference share index in the same weightings in which they are included in the index. The JSE preference share index measures performance of non-convertible, floating rate perpetual preference shares (these are the most standard form of preference share which cannot be converted to ordinary equity, or recalled by the company).

Advantages: The main attraction of preference shares as an asset class is their attractive after-tax yield. Historically SA preference shares have outperformed bonds and money market instruments on an after-tax yield basis. Historically, preference shares have appealed to tax-sensitive investors as dividends received were tax exempt until the introduction of the 15% withholding tax in 2013. That has dented their attractiveness but they still hold tax advantages.

Another benefit of this ETF is that if there is no willing buyer when you want to dispose your units, Grindrod, the ETF issuer, will step in as the counterparty.

Disadvantages: One of the main criticisms of preference shares following the collapse of African Bank is that holders have all the downside risk of equity but limited upside benefits. Preference shares are ranked below debt on the risk hierarchy of a company's balance sheet. In the event that a company is wound up, first in line are holders of senior debt, followed by senior unsecured debt and subordinated debt. However, pref shareholders do rank above ordinary shareholders. Following protracted negotiations, holders of African Bank's preference shares will be getting around a third of their money back. African Bank, however, formed a very small component of the overall pref share index.

Risk: As with all investments, there are certain risks to investing in CoreShares PrefTrax. First is the index tracking risk – the ETF's returns may not match the index returns. Second, while Grindrod stands ready to provide liquidity for investors willing to sell their units of this ETF, investors are still exposed to capital risk.

Fees: The fund's total expense ratio is 0.57%, which is within the range of other ETFs.

Historical performance

Everyone's Guide to ETFs

Annualised returns assuming reinvestment of dividends @ end-March 2016			
Investment period	Fund	Preference share index	Difference
1 year	7.9%	8.7%	-0.8
Since inception (March 2012)	0.7%	1.3%	-0.6

