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Insights: Inflation-Linked Bond ETFs July 2022

Inflation-Linked Bond ETFs & How They Could Come In Handy During Turbulent Times

With the rise of interest rates and the growth outlook perspective still uncertain; investors look for reliable options during turbulent times to navigate rising inflationary pressure, ongoing geopolitical risks, tightening monetary policies and the effects of the Covid-19 pandemic. A potential solution is to look at the inclusion of inflation-linked bonds in your portfolio.

What are bonds?

A bond is a fixed income instrument that is issued by an entity, usually government and companies. When you invest in a bond, you are effectively lending money to the government and/or companies for a fixed period, and in turn, you receive coupons (which you could think of like earning interest for lending the money), during the lifetime of the bond depending on the frequency of distribution, such as annually, semi-annually or quarterly.

There are different types of bonds such as nominal bonds and inflation-linked bonds. Nominal bonds are standard bonds in which the issuer pays a fixed coupon (interest) payment that is paid at regular intervals, over the lifetime of the bond at an agreed term. Inflation-linked bonds are just like nominal bonds, except that the regular coupon payments are linked to an inflation index, such as the Consumer Price Index (CPI). Some coupons are paid out to investors, which is termed ,'distributing', and others are reinvested into the fund, which is termed, 'accumulating' or 'total return'. During the lifetime of the bond, coupon payments are made, and when the bond matures, you receive your principal investment amount at the end of the agreed term.

How do inflation-linked bonds work?

Inflation-linked bonds are directly linked to the cost of consumer goods and services, for example, the same item that offers the exact same utility, costs more to purchase today than it did, say a year ago.The principal amount invested is adjusted for inflation regularly according to the CPI, and while the coupon rate remains fixed, the coupon amount paid may vary due to the adjusted principal amount. With the general rise in prices of goods and services over time, purchasing power is reduced and potentially, real returns over time. For example, if you have a portfolio that returns 10% and the inflation rate is 3%, then the real return is 7%. Therefore, the higher the inflation rate, the lesser the real return.

By way of a hypothetical example, Figure 1 shown below illustrates the impact of inflation on coupon interest payments and the principal amount at maturity of the bond (Y10). Given that both bonds (nominal and inflation-linked) are issued at R100 with a maturity of 10 years and different coupon rates; the coupon payments and principal amount at maturity are fixed for the nominal bond and differ in comparison to the inflation-linked bond, which increases with inflation over the lifetime of the bond.

Figure 1: Illustration of Inflation Adjustment on Nominal Bonds vs Inflation-Linked Bonds

Time	Nominal bond with 5% annual coupon rate	ILB with 2% annual coupon rate, and 2% inflation rate
Y0	-R100	-R100
Y1	5	2.04
Y2	5	2.08
Y3	5	2.12
Y4	5	2.16
Y5	5	2.21
Y6	5	2.25
Y7	5	2.30
Y8	5	2.34
Y9	5	2.39
Y10	R105	R124.34

Source:FTSE Russell

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Inflation-Linked Bond ETFs & How They Could Come In Handy During Turbulent Times (continued)

What are the risks & considerations?

Inflation-linked bonds are not without risk, even in times of rising inflation. Their value tends to fluctuate with the volatility of interest rates. As with any investment, investors should be mindful of the impact that duration has on an investment. In the case of inflation-linked bonds, the longer the duration, the more exposure to interest rate changes there may be. Just like nominal bonds, Inflation-linked bonds have an inverse relationship to interest rate changes, so if interest rates rise, bond prices fall, and if interest rates fall, bond prices rise. Even though inflation-linked bonds benefit from a rising inflation rate environment, the gains could be lost by the impact of rising interest rates.

Another consideration to take into account is that, as future inflation rates are not known for certain, they are based on market participants' inflation expectations. For example, if a 10-year nominal bond yields 5%, and a 10-year inflation-linked bond yields 3%, the market expects 2% annual inflation over the next 10 years. If inflation is expected to decrease or the economy experiences a period of deflation, the inflation-adjusted principal amount could fall below its par or face value (principal investment amount at maturity) and coupon payments would also subsequently decrease based on this deflationary principal adjusted amount. While inflation and interest rates are a major factor, there are other considerations to take into account, such as credit ratings. These factors affect inflation-linked bond prices, causing it to fluctuate.

Inflation-linked bonds are considered a low-risk investment, so generally speaking the growth potential is limited, but they can be used to lower the overall volatility when included in a portfolio. They also offer the added benefit of income, which is in the form of coupon (interest) payments. Inflation-Linked Bonds are uncorrelated to equities and/or other fixed income assets, which usually decrease in value when inflation occurs. They are a great way to increase diversification in a portfolio as they perform differently to the stock market, making them an attractive option during turbulent times.

About the Indices

The ABSA NewFunds ILBI (NFILBI), The FNB Government Inflation-linked Bond (FNBINF), and the Satrix ILBI (STXILB) are the three JSE-listed inflation-linked bond ETFs that are currently offered to investors.

The Indices:

NFILBI – Barclays South African Capital Inflation-Linked Bond Index

The Barclays South African Capital Inflation-linked Bond Index consists of bonds that are issued by the South African Government. It is linked to the Consumer Price Index (CPI) and is calculated by Barclays daily.

FNBINF - FTSE/JSE IGOV Index

The FTSE/JSE IGOV (Government Issued Bond) Index is comprised of bonds issued by South Africa in the FTSE/JSE Inflation Linked Index (CILI). It is a weighted basket of South African government inflation-linked bonds, whose returns are linked to the CPI. This Index uses a dual ranking methodology by average liquidity and average market capitalization over an averaging period. It includes conventional CPI instruments, which have a fixed (even if zero), semi-annual coupon inflated by the four-month lagged CPI in all urban areas. This excludes bonds with remaining terms of less than one year..

STXILB - S&P South Africa Sovereign Inflation-Linked Bond 1+ Year Index

S&P South Africa Sovereign Inflation-Linked Bond 1+ Year Index is a market-value-weighted Index that tracks the performance of South African inflation-linked securities that are issued by the South African government. It consists of inflation-linked securities with maturities greater than one year from the Index rebalancing date. In terms of ongoing maintenance, when an index bond misses a distribution payment, or defaults, the Index Committee may determine that the bonds are no longer prices, which is subsequently removed from the Index at the next rebalancing date.

Fund Information & Statistics

Information on the three inflation-linked bonds are illustrated below in Figure 2. All three ETFs consist of bonds that are issued by the South African Government and are linked to the South African Consumer Price Index, as all three ETFs have the same portfolio holdings, just different weightings of these holdings.

Both the ABSA New Funds ILBI ETF and the FNB Government ILB ETF are distributing ETFs, while the Satrix ILBI ETF is a total return ETF, which means that all incomes (coupons) are reinvested. The Absa New Funds ILBI ETF recently changed its distribution method from accumulating or total return to distributing, with effect from 1 April 2022. The distribution frequency of the incomes differ. The ABSA New Funds ILBI ETF distributes monthly, the FNB Government ILB ETF distributes quarterly, and the Satrix ILBI ETF distributes semi-annually

The Satrix ILBI ETF is the cheapest of all three ETFs, with a TER of 0.25%, which is followed by the ABSA New Funds ILBI ETF with at 0.35% and then the FNB Government ILB ETF at 0.42%. The Satrix ILBI ETF is also the largest ETF in terms of fund size.

Figure 2: Inflation-linked Bond General Information

Info	ABSA NewFunds ILBI	FNB Government Inflation-Linked Bond	Satrix ILBI
JSE Code	NFILBI	FNBINF	STXILB
ISIN	ZAE000162244	ZAE000215331	ZAE000240123
Inception Date	27/01/2012	19/05/2009	03/03/2017
Objective	The objective of the NewFunds ILBI is to track the Barclays Capital/Absa Capital South African Inflation-Linked Bond Total Return Index as closely as possible	The objective of the FNBINF ETF is to track the FTSE/JSE IGOV Index ("iGov") Index as closely as possible. Prior to 01/07/2020, the ETF tracked the performance of the Government Inflation-Linked Bonds Index (GILBx)	The objective of the Satrix ILBI is to track the S&P South Africa Sovereign Inflation-linkedBond 1+ Year Index, as closely as possible
Accumulating/Distributing	Distributing: Change from total return to distributing with effect from 01/04/2022	Distributing	Accumulating: It is a total return ETF - all incomes will be reinvested going forward. (Published NAV will be corrected/adjusted)
ASISA Sector	South African - Interest Bearing - Variable Term	South African - Interest Bearing - Variable Term	South African - Interest Bearing - Variable Term
Underlying Index	Barclays South Africa Capital Inflation-Linked Bond Index	FTSE/JSE IGOV	S&P South Africa Sovereign Inflation-linkedBond 1+ Year Index
Rebalance Frequency	Monthly	Monthly	Quarterly
TER	0.35%	0.42%	0.25%
Dividend Distribution Frequency	Monthly	Quarterly	Semi-annually
Dividend Yield	2.67%	2.73%	2.63%
Last four distributions (cpu)	May 2022 – 19.02	March 2022 - 15.41	December 2021 - 9.26
	May 2022 - 21.17	December 2021 - 16.44	June 2021 - 9.68
	March 2022 - 17.65	September 2021 - 13.87	December 2020 - 11.25
	February 2022 - 17.68	June 2021 - 16.93	June 2020 - 12.41
Fund size	R116.5mil	R423.8mil	R522.7mil
Number of holdings	10	10	10
Holdings (06/2022)	R197, SA Debt 3-5 Years, 14.06%	R197, SA Debt 3-5 Years, 14.22%	R197, SA Debt 3-5 Years, 14.27%
	I2025, SA Debt 3-5 Years, 13.98%	I2025, SA Debt 3-5 Years, 14.22%	I2025, SA Debt 3-5 Years, 14.27%
	I2050, SA Debt 12+ Years, 13.55%	I2050, SA Debt 12+ Years, 13.66%	I2050, SA Debt 12+ Years, 13.71%
	I2038, SA Debt 12+ Years, 11.90%	I2038, SA Debt 12+ Years, 12.08%	I2038, SA Debt 12+ Years, 12.17%
	R202, SA Debt 12+ Years, 11.87%	R202, SA Debt 12+ Years, 11.98%	R202, SA Debt 12+ Years, 12.04%
	I2046, SA Debt 12+ Years, 11.62%	I2046, SA Debt 12+ Years, 11.70%	I2046, SA Debt 12+ Years, 11.72%
	R210, SA Debt 7-12 Years, 8.32%	R210, SA Debt 7-12 Years, 8.45%%	R210, SA Debt 7-12 Years, 8.48%%
	I2033, SA Debt 12+ Years, 7.11%	I2033, SA Debt 12+ Years, 7.00%	I2033, SA Debt 12+ Years, 7.25%
	I2029, SA Debt 7-12 Years, 5,98%	I2029, SA Debt 7-12 Years, 5,82%	I2029, SA Debt 7-12 Years, 6.09%

Source:Profile Data, Morningstar

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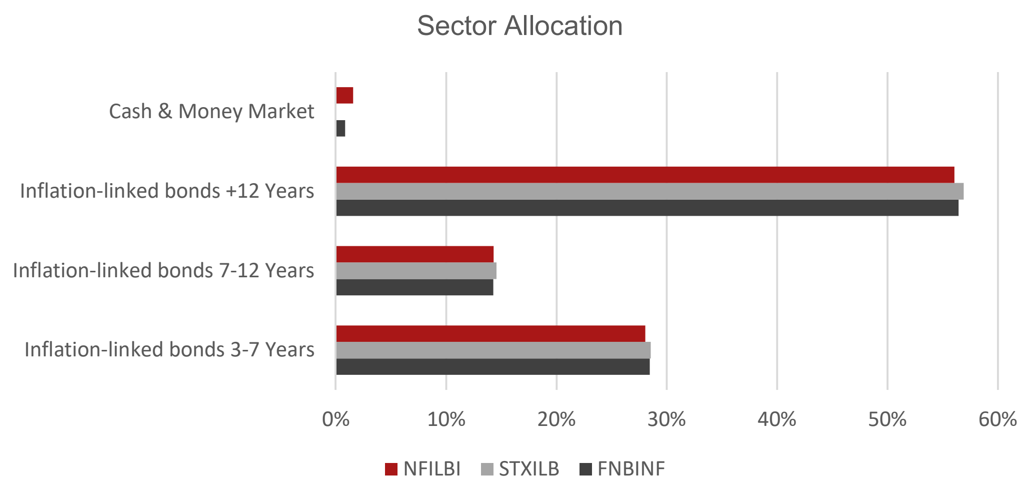
Sector Allocation

As highlighted with the general information of each ETF, the sector allocation of all three inflation-linked have the same portfolio holdings, just the weightings differ. Figure 3 illustrates this graphically where it is seen that the majority of the ILB holding for each ETF heavily weighted towards inflation-linked bonds with a duration of 12 or more years, highlighting the long-term view of these ETFs.

Figure 3: Inflation-Linked Bonds Sector Allocation

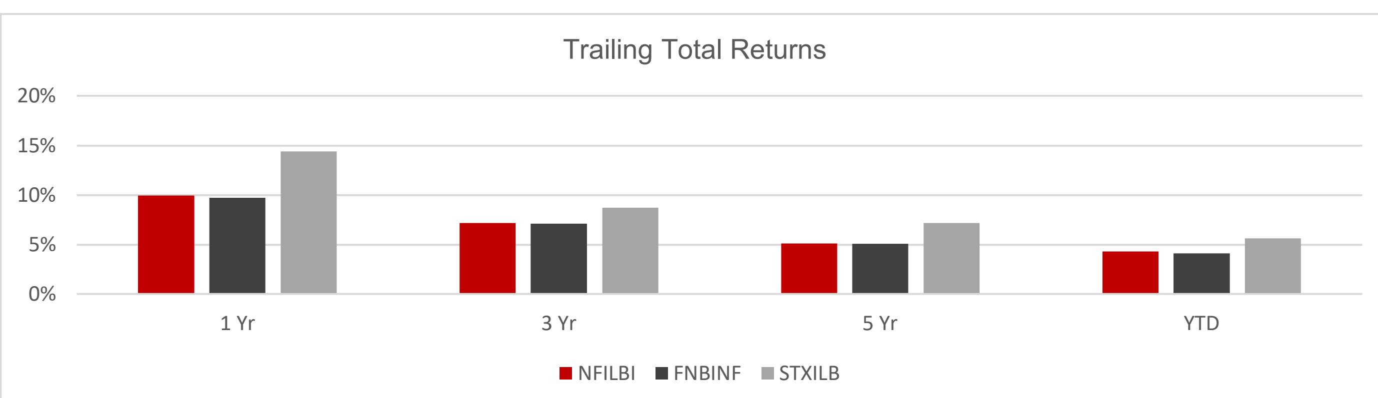


Source:Profile Data, ABSA, FNB, and Satrix

Performance

Looking at the performance figures, the picture starts to be a bit quite different. Figure 4 illustrates that the trailing returns of the Absa New Funds ILBI ETF and the FNB Government ILB ETF are almost alike, whereas the Satrix ILBI ETF has outperformed the others on the 1-year, 3-year, 5-year and yield-to-date front. One thing to keep in mind is that with distributing ETFs, incomes are paid out, whereas with total return ETFs, distributions are reinvested into the fund to offer you growth in the fund, therefore, raising the value of your investment. It all depends on how you would like to structure your portfolio, keeping in mind that with distributing ETFs, you get cash so you would also need to have a look at your cash holdings.

Figure 4: Inflation-Linked Bonds Trailing Return



Source: Morningstar

Performance (continued)

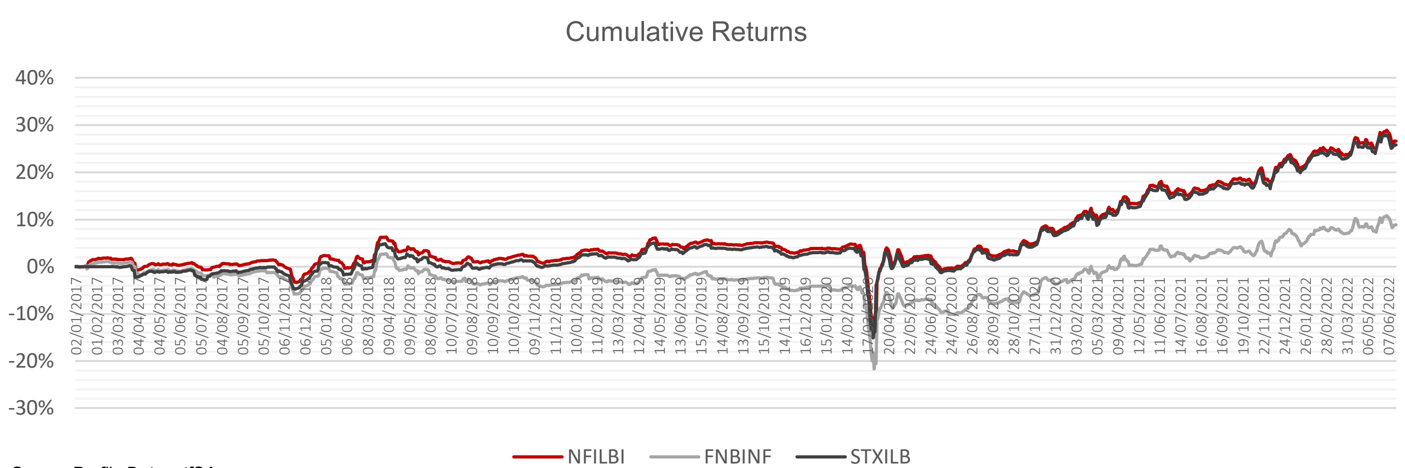
Figure 5 Illustrates the risk-return metrics of these inflation-linked bonds. All of these ILBI ETFs have all outperformed inflation on the 1-year, 3-year, 5-year and yield-to-date front. As we have seen, there is still some volatility to consider with these ETFs, as they are not without risk, however the volatility is still generally lower compared to equity counterparts. Figure 6 illustrates the cumulative performance over 5 years, we see that the Absa New Funds ILBI ETF and Satrix ILBI ETF are almost alike.

Figure 5: Inflation-Linked Bonds Risk-Return Metrics

Time	NFILBI			FNBINF			STXILB		
	Return	Annualised Inflation	Volatility	Return	Annualised Inflation	Volatility	Return	Annualised Inflation	Volatility
YTD	4.3%	3.1%	1.54	4.12%	3.1%	1.58	5.63%	3.1%	1.8
1 Yr	9.96%	6.51%	1.59	9.72%	6.51%	1.67	14.4%	6.51%	1.73
3 Yr	7.19%	4.56%	2.37	7.13%	4.56%	2.86	8.72%	4.56%	3.13
5 Yr	5.13%	4.51%	2.17	5.07%	4.51%	2.56	7.17%	4.51%	2.7

Source:Profile Data, etfSA

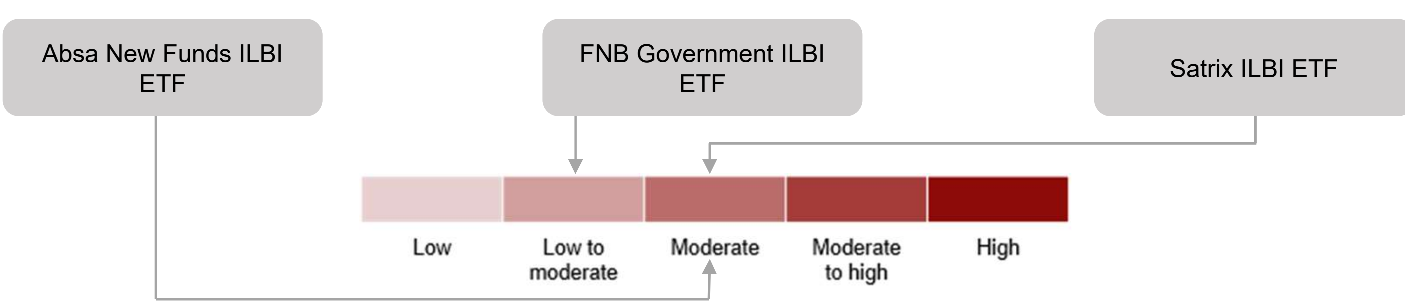
Figure 6: Inflation-Linked Bonds Cumulative Total Return Performance



Source:Profile Data, etfSA

Risk Profile

Investors need to be mindful of the risk profile of funds so that they can structure their portfolio. The Absa New Funds ILBI and the Satrix ILBI ETF are more on the moderate side of the scale, whereas the FNB Government ILB ETF is on the lower-to-moderate side of the scale. These ILB ETFs are suitable for investors with a long-term view, who wish to preserve their real returns, while earning income. All things considered, they also provide the benefit of diversification and could be a viable option for inclusion in a portfolio when navigating the uncertainties that we currently face.



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