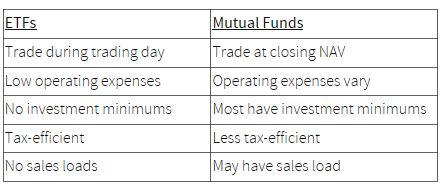
**Background info:**

**Why ETF’s**

The appeal of ETFs is twofold: a simple, low-cost means of gaining a diversified portfolio and the capacity for intraday trading. They also offer investors the ability to invest in a range of asset classes which may otherwise be inaccessible or prohibitively expensive, including emerging market equities and commodities. ( ALSO SEE ABOVE TABLE)

**About ETF**

* Listed on a registered exchange (JSE) and therefore must obey regulation.
* Generally, an ETF will physically hold the underlying assets.
* Tracks an underlying index (like JSE top 40)
* ETFs also tend to have lower management fees and brokerage costs because an ETF will not generally buy or sell its underlying assets to create shares
* <https://core.ac.uk/download/pdf/6218589.pdf>

ETFs trade liquidly on the exchange, and do not stray far from the NAV, because the market makers can so easily arbitrage the difference.  
  
Read more: [Redemption Mechanism](http://www.investopedia.com/terms/r/redemption-mechanism.asp#ixzz4hGR53Ntc) <http://www.investopedia.com/terms/r/redemption-mechanism.asp#ixzz4hGR53Ntc>

The Creation and Redemption Process ETFs are typically structured as open-ended companies, which allows the number of shares in the fund to vary over time. Unlike managed funds, however, retail and institutional investors must purchase ETF shares on a stock exchange and cannot buy or sell shares directly from the fund. Before an ETF can commence trading, the fund undertakes a process of creation in the primary market (Figure A1). An ETF will create shares in large blocks (typically of between 25 000 and 200 000 shares), referred to as ‘creation units’, which can only be purchased by Authorised Participants  – usually market-makers or institutional investors that must be registered with the ETF. To purchase a creation unit in an ETF tracking an equity index, an Authorised Participant does not generally use cash but instead transfers a portfolio of securities to the ETF (usually comprising the shares underlying the index it is tracking). Once the creation unit is transferred to the Authorised Participant, it can be broken up and sold on the secondary market. Only at this point can retail and institutional investors buy and sell ETF shares via a stock exchange. Authorised Participants can also dispose of their shares by selling them back to the ETF through a process of redemption, which is essentially the reverse of creation. Cash may be used during the creation and redemption process for those funds using derivatives to track their benchmark.

Creations and redemptions of ETF shares occur on an on-going basis and are priced at the net asset value (NAV) of the assets held by the fund. ETFs are required to publish daily information about the fund’s holdings of securities and NAV, as well as the composition of the portfolio needed for creations and redemptions. On the secondary market, ETF prices are determined through intraday trading on the stock exchange, but should usually mirror the ETF’s intraday NAV. Because ETFs trade on the stock exchange, their prices are subject

to fluctuations in supply and demand, which may cause the ETF to trade at a premium or discount relative to its NAV. However, these deviations are usually small, with any sufficiently large opportunities exploited by arbitrageurs. Dividends are either paid to investors periodically or reinvested into the ETF.

* <https://core.ac.uk/download/pdf/6218589.pdf>

Benefits and Risks of ETF Investment

ETFs can offer a number of benefits to investors, including: a simple, low cost means of diversification and the ability to be bought and sold intraday. As ETFs trade like ordinary shares they can often be short sold (where a security is borrowed and then sold, allowing the seller to profit from falling prices) and investors can use risk-management strategies such as limit and stop-loss orders in making trades. They also enable investors to invest in a range of asset classes, including emerging market equities and commodities that might otherwise be difficult to access. Further, ETFs tend to be a cost-effective method of investing, with expenses generally lower than similar products offered by managed funds. However, ETF investment does not come without risks and ETFs are increasingly attracting the attention of regulators. Generally, concerns about ETFs stem from liquidity and counterparty risk and, in some cases, complexity and a lack of transparency. An ETF’s liquidity on the primary market is linked to the liquidity of the underlying assets. In addition, some ETFs may not trade actively intraday and market volatility can inhibit liquidity for ETFs if large ETF traders withdraw from the market or there is difficulty in creating new ETF shares. Events such as the ‘flash crash’ of the S&P 500 on 6 May 2010, where ETFs were severely affected by the sudden fall in US equity prices, have also raised questions as to their potential contribution to heightened market volatility as well as their broader impact on market structure. Counterparty credit risk is an issue for synthetic ETFs, particularly those using swaps (see Box A), and those lending the securities underlying the ETF to generate additional income. Collateral arrangements and swap resetting are typically used to address this and attempts have been made by a number of swap-based ETF providers to increase the frequency of swap resetting, with some providers also engaging multiple swap counterparties.5 There has also been a shift by some ETF providers towards a swap structure where collateral is pledged to the fund. However, this may not guarantee immediate access to the

collateral in the event of a counterparty default and highlights the importance of sound collateral management practices. Finally, there is the issue of complexity and transparency. Part of the appeal of physical ETFs is their simplicity, and some investors are attracted by the fact that their interest in the fund is backed by the assets underlying the benchmark. However, there has been significant growth in the number of ETFs with complicated structures using derivatives to create leverage, as well as funds based on opaque performance benchmarks. In some cases, the exact structure and types of derivatives being used by ETFs are unclear. These more complex investments can vary considerably in both their structures and the risks they present.

* <https://core.ac.uk/download/pdf/6218589.pdf>