A wise investor once said, “The world of investing can be very exciting, but one shouldn’t set out to make it so!”

One way to make investing too exciting is to assume excessive risk in the hope of achieving the maximum possible returns. While the aim of investing should be to maximize your return, those returns should be measured relative to your ability to assume risk.

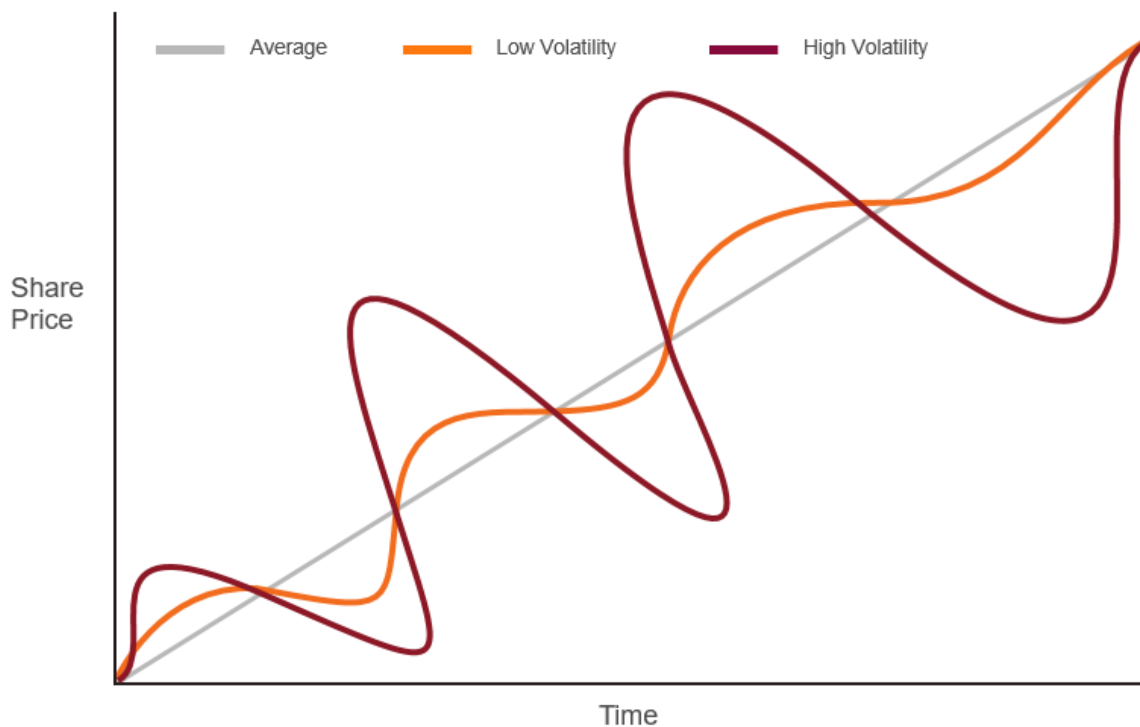
We believe a large part of investing comes down to managing risk and avoiding losses. By effectively managing risk, investors are able to lock in gains, or at least avoid putting those gains at risk.

To do this, it’s important to understand the relationship between risk and reward to ensure that any risk that you take comes with the appropriate compensation.

Risk and Return

In the world of investing there is a very strong, positive, long-term relationship between risk and return. Considering asset classes as a whole, the more risk an investor is willing to take, the more they are likely to be rewarded over the long-term.

The *volatility* of an asset class is considered to be a very good barometer of its risk because volatility is an indication of the uncertainty of the future value of an asset. In the diagram below, it is difficult to predict the future value of the High Volatility asset because there are more possible outcomes due to its higher peaks and troughs. By contrast, the value of the Low Volatility asset keeps within a narrower band and its future value is more certain.



Investors with a high risk tolerance—those who can absorb short-term losses over a long investment horizon—are advised to invest heavily in risky assets such as equities. On the flip side of this coin is the fact that risky assets also offer the greatest potential for short-term losses. Investors with a low risk tolerance—those with a low appetite for short-term losses and a short investment horizon—typically invest in defensive asset classes such as bonds and cash.

Equity Risk and Equity Return

There is an interesting relationship between *changes* in volatility and equity returns. The relationship is still strong, as in the case of risk and return, but is negative! A sudden spike in equity volatility will result in an immediate and proportional loss in equity valuations 90% of the time. From a returns perspective, it is good to be exposed to volatility over the long-term. However, extreme volatility is very rarely rewarding and in most cases a sudden volatility spike is actively bad.

From a risk perspective, investors should assume risk to maximize returns. When risk becomes excessive, however, they should remove risk from their portfolio by selling equities and investing in defensive asset classes. The asset class with the lowest risk is cash, as its volatility is considered to be virtually zero.

Managing Volatility

Consider a portfolio consisting of equity, and assume the equity volatility is 20% (in reality, equity volatility fluctuates daily). If the investor sells 25% of their equity and holds it in cash the overall portfolio volatility is now:

(Equity Weighting X Equity Volatility) + (Cash Weighting X Cash Volatility)

= (75% X 20%) + (25% X 0)

= 15% + 0%

= 15%

By adjusting the formula slightly, one can see that it is possible to achieve a consistent portfolio volatility by adjusting the allocation to equity and cash based on the realized volatility in the equity market, using the equation:

Target Volatility/ Realised Volatility = Equity Weighting in Portfolio

Using the same figures as above and assuming that 15% is the desired portfolio volatility:

15%/20% = 75%

Should realized equity volatility decrease to 15%, the result would be:

15%/15% = 100%

The portfolio would increase it equity position to 100%.

In practice, this means that investors can effectively tailor the amount of risk that they are happy to assume in their portfolio on a consistent basis, by adjusting their allocation to equity and cash on a daily basis. Target Volatility strategies de-risk portfolios when systemic risk is high (equity volatility), and increase portfolio risk when systemic risk is low.

This strategy has been used very effectively by pension funds and other large investors for several years, but in February 2019, Absa launched 3 NewFunds Managed Volatility ETFs that are accessible by retail investors.

The 3 ETFs target the following volatilities for 3 broad risk tolerances:

Fund	JSE Code	Targeted Volatility
NewFunds Risk Managed **Defensive**	NFEDEF	8%
NewFunds Risk Managed **Moderate**	NFEMOD	15%
MewFunds Risk Managed **High Growth**	NFEHGE	20%

*For context, long-term equity volatility is 18-20%

How have they performed?

Footnote:

1. In addition to the Target Volatility process, the funds also employ a maximum loss strategy in downward trending markets. This is done to ensure that the maximum loss that a portfolio can incur is capped even if volatility doesn’t spike. It is additional risk management strategy
2. The funds will only trade for changes in asset allocation of greater than 10%. This is done to reduce the impact of incurring trading costs for no tangible benefit