TD Asset Management

NEW THINKING

Not Good or Bad Risk, Just Low Risk

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"Risk is good". For some time up to 2001, that quote was used in ad campaigns by a leading risk consulting company to promote its services. The underlying assumption was that by taking measurable risk, investors would gain higher returns. Unfortunately, that wisdom failed to materialize in the subsequent tech crash, although it handsomely helped the abovementioned consulting company's bottom line. Since then the narrative around risk has changed, suddenly equity investors learned that there were two types of risk: good and bad. Naturally, bad risk was to be avoided, but taking a good risk was okay; as it would eventually lead to higher returns. That's what active equity managers should do! But how can one determine which risks are good and which are bad?



Low volatility investing takes a simpler approach when it comes to classifying risk and assumes that it is impossible to tell in advance which risks are good and which are bad. The appropriate solution is to choose well diversified portfolios, with the lowest volatility possible. Though the low volatility approach to risk classification has been validated over the years, the notion that taking good risks will lead to higher returns is still commonly held. This belief can be especially strong near the end of long bull markets, when low volatility funds tend to predictably lag other actively managed strategies. The increased confidence investors may have in their portfolio manager's skill during this period is supported by the higher returns they receive; leading many to eschew caution for greater gains. But bull markets are not never-ending. Presently, many investors have realized that supposedly good risk comes with an even higher cost. The last

quarter of 2018 is a stark reminder of past market corrections and a potential preview of what may lie ahead in the future.

Since the launch of our low volatility funds in 2009, three criticisms have circulated repeatedly:

Low volatility funds will underperform over the long term, because they only focus on risk.

Low volatility funds are all the same and it does not matter which one you choose.

Rising interest rates will have a strong and prolonged negative impact on low volatility funds.

Let us address these three criticisms, considering our management experience with low volatility strategies over the last nine years.

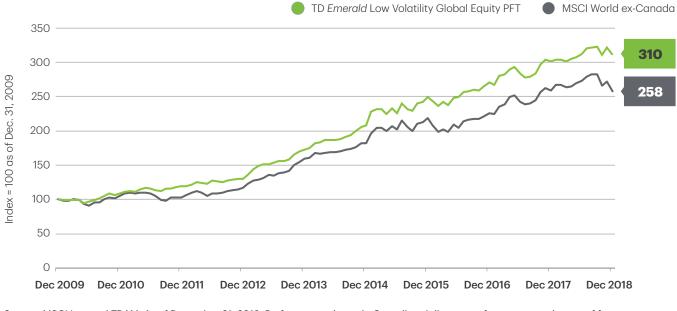
Criticism #1: Low volatility funds will underperform over the long term, because they only focus on risk.

The proponents of this criticism argue that the accumulated wealth during good periods will largely compensate for the higher risks undertaken and will create a comfortable 'cushion' against potential future market drops. For example, between December 2016 and September 2018, the MSCI World Gross Index in \$USD went up by 30.3%, compared to 25.3% for the MSCI World Minimum Volatility Index, outperforming by 5%.¹ During that same period, many low volatility investors were unhappy with their portfolio manager, although the underperformance was hardly unexpected. The investment euphoria experienced by many came to an end in October 2018 and the accumulated 'cushion' all but disappeared by the end of the year.

Low volatility equity investing is about minimizing risk, which can translate into smoother return patterns in both up and down markets. Evaluating an investment strategy over a short time period is not a prudent approach; and twenty-one months of a strong bull market is far from a full market cycle to make any meaningful conclusions. However, it is anticipated that market volatility will return to historically-normal levels; therefore, investors in low volatility equities are positioned to benefit from the risk reduction capabilities of the strategy. The chart below shows the cumulative performance of the TD *Emerald* Low Volatility Global Equity Pooled Fund Trust versus its capitalization weighted benchmark.

¹Returns for the MSCI World Gross Index (USD) and MSCI World Minimum Volatility Index (USD) were taken from Bloomberg Finance L.P. Data as of December 2018. Pooled Fund Trust = PFT.

A longer performance review: Dec. 2009 - Dec. 2018



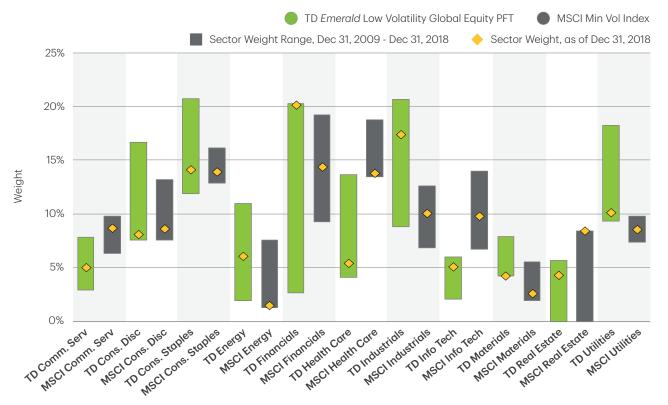
Source: MSCI Inc. and TDAM. As of December 31, 2018. Performance shown in Canadian dollars, net of expenses and gross of fees. Please refer to Appendix standard performance data for the TD *Emerald* Low Volatility Global Equity PFT.

Criticism #2: Low volatility funds are all the same and it does not matter which one you choose

This is a common misconception that most opponents of low volatility strategies state frequently, but is it true? There are various ways to construct low volatility strategies and the resulting portfolios or indices are anything but similar. For example, holding fifty percent cash in an equity fund, or having a well-diversified portfolio of large cap, high dividend paying stocks, can both represent viable low volatility strategies. Truly, there is no singular way to construct a low volatility fund; a key reason for this being the inability to definitively measure risk.

Index providers, portfolio managers, consultants and sponsors cannot agree on a single, universally accepted measure of risk. Standard deviation, variance and beta are all used in various fashions to build low volatility portfolios. Some use risk models to choose and weight securities, because they consider the correlation among stocks to be important. Other strategies base their solutions on stock volatility rankings. In some indices and funds, deviating from the capitalization-weighted benchmark is an additional risk that is managed separately or through various constraints. Hence, there are various methodologies used by portfolio managers and financial engineers to construct low volatility equities.

There is an unlimited combination of stocks that can result in reduced volatility for a portfolio. The difference in stock, sector or country weights could be significant. For example, consider the following chart comparing the historical sector allocations of the TD *Emerald* Low Volatility Global Equity PFT and MSCI World Minimum Volatility Index:



Sector weights relative to fund history: Dec. 2009 - Dec. 2018

Even if both strategies aim to minimize the volatility, their sector exposures at any given time are strikingly different. The construction of each strategy reflects the different approach taken regarding the underlying capitalization weighted index used as a stock selection universe. While the TD *Emerald* Low Volatility Global Equity PFT does not impose any constraints relative to the parent index, the MSCI Minimum Volatility Index closely aligns stock, sector, style and country weights to the parent cap-weighted benchmark (i.e. MSCI World Index). Though both methods will likely reduce volatility, the respective differences in their design can impact the timing and amplitude of the resulting return patterns.

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Criticism #3: Rising interest rates will have a strong and prolonged negative impact on low volatility funds

Economic theory suggests that any unexpected rise in interest rates will have an adverse impact on financial markets; fixed income instruments being notably impacted due to their inverse-relationship with interest rates. Given that low volatility equities are considered by many investors to be substitutes for bonds, they can underperform high volatility equities when interest rates rise unexpectedly. Low volatility equities tend to pay higher dividends; given that they invest in defensive sectors, such as Utilities, that are more sensitive to interest rates. However, such an outcome assumes that (i) the rise in interest is sudden and unexpected and (ii) that the holdings within low volatility strategies are static. In reality, these two assumptions are not accurate. First, changes in interest rate policy for major central banks are rarely

Source: MSCI Inc. and TDAM. As of December 2018.

unexpected; and are oftentimes telegraphed ahead of any official announcement to help avoid market turmoil. Secondly, low volatility funds are dynamically constructed and managed, in that they can adapt quickly to a changing interest rate environment. The allocation to stocks and sectors that can be negatively impacted by an interest rate increase will be lowered, while the allocation to sectors that can benefit from said increase will be raised. The chart on the previous page illustrates this transition. The allocation to Utilities in the low volatility fund is at a historical low, whereas the allocation to the financial sector is at a historical high.

As the low volatility fund adapts, the impact of rising interest rates can be short lived and negligible. Empirical evidence and historical back-testing conducted by TDAM has supported this finding; less volatile equities outperformed during the 1953-1981 period, when interest rates were rising on average, and in 1981-2016, when interest rates were mostly falling.

The low volatility investing advantage: Expect the Unexpected

Forecasting future stock returns remains a very difficult task with an uncertain outcome. Many times, the risks taken to attain higher expected returns are not compensated and investors come out disappointed by the results. In contrast, the strategy of low volatility investing is that return outcomes are more aligned with investor expectations, than for most other active strategies. The lagging performance of low volatility equities during bull markets is countered and compensated with their outperformance during market downturns. Low volatility funds that utilize dynamic risk models can adapt quickly to changing market environments and provide timely protection against any foreseeable risks. In addition, a smart construction methodology and hands-on, proactive management will provide further protection against unforeseeable or unexpected events. With a low volatility equity fund, investors do not need to concern themselves with which risks are good or bad – a well-constructed low volatility strategy eliminates the need for them to make such a distinction.

Appendix

Returns as of December 31, 2018	1 Year	3 Years	5 Years	Since Inception	Inception Date
TD Emerald Low Volatility Global Equity Pooled Fund Trust	3.11%	7.62%	12.41%	13.31%	12/22/2009
100% MSCI World Ex Canada ND - C\$	-0.15%	5.72%	10.20%	11.04%	12/22/2009

Note: Returns for periods greater than one year are annualized. Returns are net of expenses.



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