The Cost of Diversification

KEY TAKEAWAYS

- Retirees need returns but, just as importantly – they need to manage risk.
- Volatility and capital losses wreak havoc with a portfolio when retirees are no longer accumulating assets and instead drawing down their capital.
- Diversification is often the first-line defence but the limits of the strategy were particularly exposed during the global financial crisis.
- An active risk management strategy can supplement and address the shortcomings of diversification, for the benefit of investors

Typical Australian 60/40 balanced portfolios experienced losses of 20% or more at the nadir of the crisis, destroying retirement income expectations, especially for those who succumbed to poor investor behaviour and sold assets under duress.

Since then, a range of highly-diversified products with lower equity market exposure have been launched in an effort to provide better risk-adjusted returns. Funds now often include allocations to defensive alternatives such as hedge funds, infrastructure and listed real estate to reduce volatility.

Adding these asset classes to a portfolio can be a beneficial risk management strategy, however; many of these diversifiers are still highly exposed to equity market risk, particularly in stressed markets. In addition, the diversified strategies have a cost or drag on growth as a trade-off for risk management.

Defensive alternatives such as Commodity Trading Advisers (CTA) or managed futures have historically provided a negative correlation to equity markets in systemic market stress periods. CTA trading strategies are generally trend following or momentum plays and can be employed across commodity and financial futures.

The Barclay CTA (US$) Index returned 14.04% in 2008 while the S&P 500 lost 37%, illustrating the potential diversification benefits of momentum-based strategies.

Not surprisingly, CTA allocations within multi-asset portfolios have grown in order to capture these diversification benefits.

While diversification remains the cornerstone of risk management, it cannot adequately protect a portfolio in periods of systemic risk. Instead, more explicit risk control strategies have grown in appeal – particularly for retirees.

Being more efficient with direct risk management

Within a typical balanced fund, 90% of the investment risk resides in the equity (or growth) allocations. Therefore, it would make sense to manage this equity market risk exposure directly to improve protection.

Managed risk strategies are generally applied as portfolio overlays using a rules-based approach in order to dynamically manage the actual market risk exposure. Equity market risk is directly managed instead of hoping another asset class pays off – and so 'protects' the portfolio – in a market crisis.

The S&P 500 Risk Control™ Indices are an example of a managed risk strategy which overlays mathematical algorithms to control the index risk profiles at specific volatility targets. The indices dynamically rebalance exposure to maintain 5%, 10%, 12%, or 15% volatility targets. For example, with the 15% target, if current S&P 500 volatility equals 30%, then the exposure to the market would be dynamically shifted to 50%.

Specialist risk management firms have been successfully operating globally since the 1990s managing these type of rules-based strategies for large financial institutions and retail funds. The attraction of institutional-grade operations coupled with transparent and effective risk management has seen the managed risk fund category grow rapidly.

With diversification, an allocation to an asset class negatively correlated to equity market downturns would need to be large enough to provide a meaningful buffer in a crisis. However, de-allocation from growth to these diversifiers can also cause a significant performance drag. For example, the Barclay CTA index performance during the equity market rebound (2010-2015) was 7.9% while the S&P 500 index experienced 111.31% in growth.

While risk-adjusted performance is an enviable objective of diversification, managing risk directly can provide a more efficient risk-adjusted performance improvement.

Figure one compares the performance of the S&P 500 against a range of hypothetical portfolios which aim to control risk: an S&P 500 Risk Control Index, a blended S&P 500/Barclay CTA index and a S&P 500 index with a Milliman Managed Risk Strategy™ overlay.

The S&P 500 Risk Control™ Index provided more downside protection during the 2007-2009 GFC and participated more in the January 2010 to November 2015 rebound than the portfolio diversified with the Barclay CTA index.

Importantly, this outperformance is delivered through a fully transparent predictable strategy in comparison to more opaque hedge fund solutions and delivered without the use of high fee CTA/ hedge fund managers.

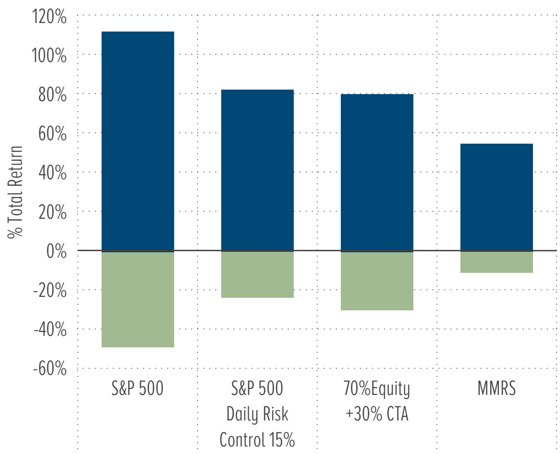
The hypothetical S&P 500 plus MMRS overlay portfolio shows how managed volatility and further downside risk management strategies can be combined to provide more protection than the managed volatility strategy in isolation. This illustrates an enviable objective: maximising the ratio of return to drawdown and protecting a retiree's capital.

Figure two highlights the performance of the various strategies from 2007-2015 showing how controlling volatility can turbocharge compound returns.

For example, the S&P 500 15% Risk Controlled Index returned 81.26% compared to the equity market's higher 111.31% rebound since 2009. However, because the risk-controlled strategy compounded from a higher base (thanks to a level of capital protection during the GFC), the strategy still ends up ahead of the S&P 500 over the entire period.

As the saying goes, "there is always more than one way to skin a cat!"

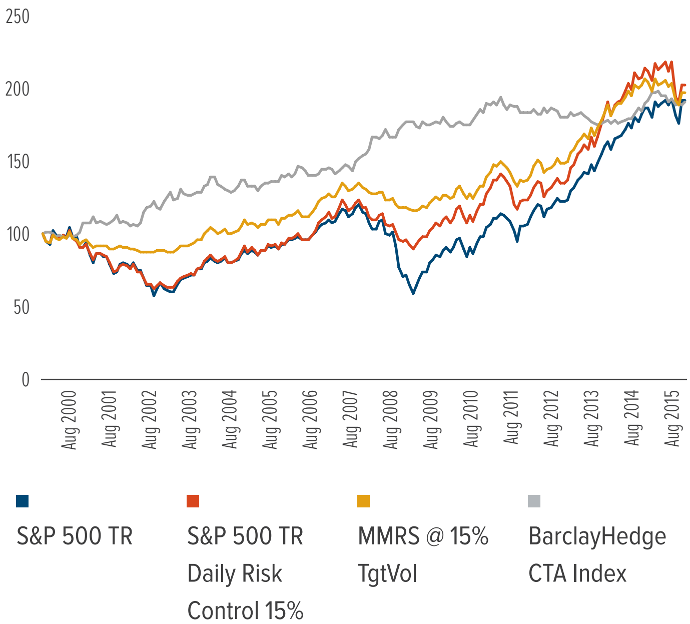
FIGURE 1. MANAGED RISK IMPROVEMENT COMPARISON



	S&P 500	S&P 500 Daily Risk Control 15%	70%Equity +30% CTA	MMRS
■ 2009-2015 Equity Rebound	111.31%	81.26%	80.30%	55.10%
■ GFC Equity Drawdown	-48.45%	-23.67%	-29.80%	-11.83%

The performance shown is historical, for informational purposes only, not reflective of any investment, and does not guarantee future results. Any reference to a market index is included for illustrative purposes only, as it is not possible to directly invest in an index. Indices are unmanaged, hypothetical vehicles that serve as market indicators and do not account for the deduction of management fees or transaction costs generally associated with investable products, which otherwise have the effect of reducing the performance of an actual investment portfolio. The hypothetical results are based on simulated performance results. These results have certain inherent limitations. Unlike results shown in an actual performance record, these do not represent actual trading. Also, because these trades have not actually been executed, these results may have under-or over-compensated for the impact, if any, of certain market factors, such as lack of liquidity. Simulated or hypothetical trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve profits or losses similar to these being shown.

FIGURE 2. S&P 500 AND RISK CONTROLLED PERFORMANCE 2007-2015



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for more information:

AU.MILLIMAN.COM/FRM
+61 0 2 8090 9100

Sydney

32 Walker Street
North Sydney, NSW 2060
Australia
+ 61 0 2 8090 9100

Chicago

71 South Wacker Drive
Chicago, IL 60606
+1 855 645 5462

London

11 Old Jewry
London
EC2R 8DU
UK
+ 44 0 20 7847 1557