Staying the Course with Risk Management

CASE STUDY

Milliman

BACKGROUND

The 2008 GFC and recent markets linked to the COVID-19 pandemic highlight how extreme markets can erase the long term gains of equity markets in a matter of weeks, as illustrated by the following chart.

As a global actuarial and risk management firm, Milliman has long advocated the need for consideration and management of the risk that comes with short term volatility or market corrections. Although much of this work manifests itself in the management of institutional liabilities for insurance companies or defined benefit pension plans, the same risks are present for sizeable groups of members within Defined Contribution retirement schemes – such as the Australian superannuation system. In particular, superannuation fund members who are nearing retirement, or in retirement may have greater exposure to the risks of a market correction at the wrong time, or “sequencing risk”.

As the 2008 financial crisis (and various market events previously) demonstrated, this risk is not novel or new. What has changed over the last two decades, is that with increasing numbers of people migrating through the retirement “risk zone” where sequencing risk is at its peak, the consequences of a major market correction are felt across an ever increasing number of superannuation fund members.

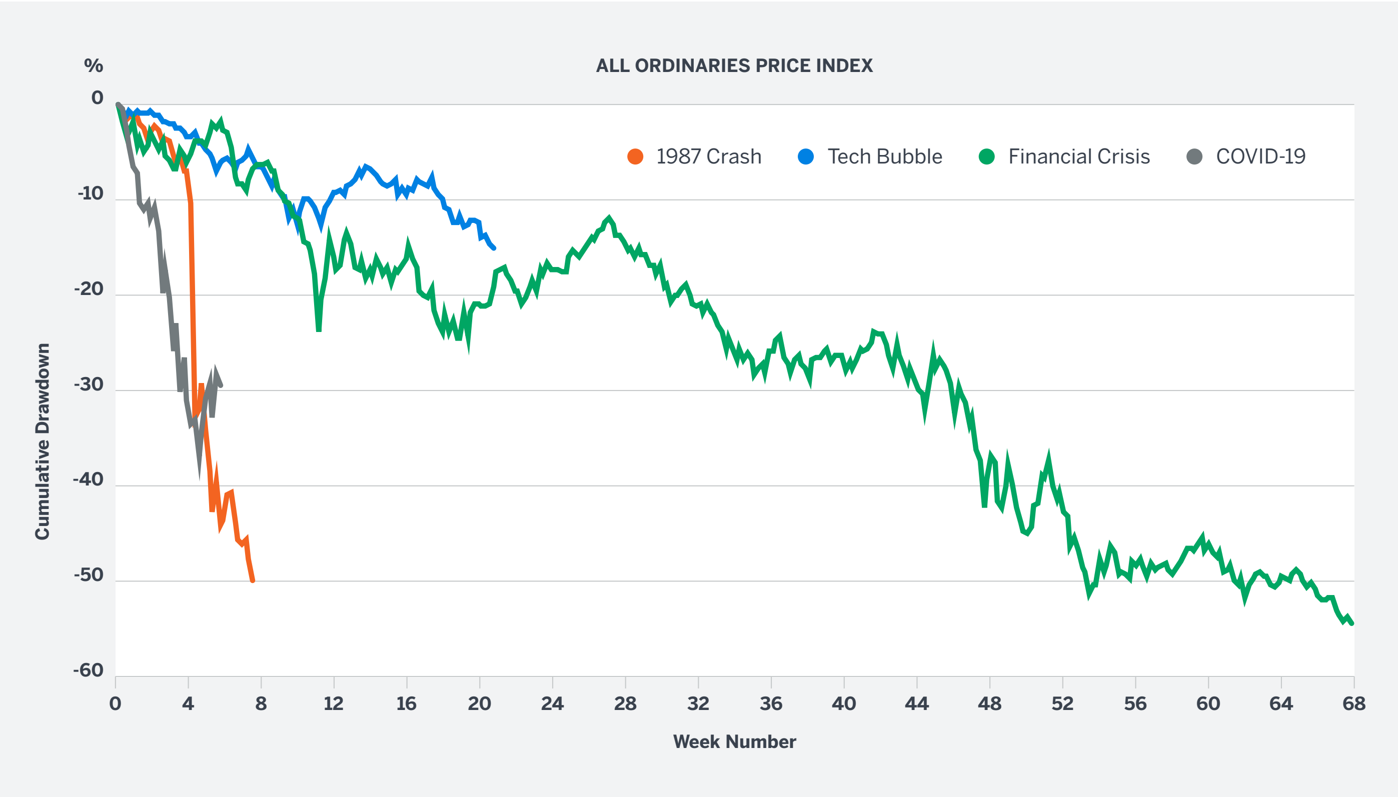
Milliman has worked with many clients over the years to help quantify the level of risk to which members are exposed as well as to assess a variety of approaches to help mitigate and manage it, in the event that a fall in the value of assets poses a sizeable impost on future retirement lifestyles.

This work is supported through our ongoing and active risk management activity, where Milliman implements and executes various strategies to manage risk, across a range of contexts including exchange-traded funds (ETFs), managed funds, managed accounts, and superannuation funds.

For Maritime Super, one of our superannuation partners, Milliman has managed this through an ongoing risk management programme, referred to as ‘MVP’, since 2014. Maritime Super offers the MVP overlay as a choice feature which can be added to their Growth Option and it is also included in their MySuper strategy for members aged over 55 (their Moderate Option).

This case study will highlight some of the considerations, rationale and performance through the recent market environment.

Figure 1: Recent market crashes



RISK IN SUPERANNUATION

Superannuation funds are caught between two competing objectives. On the one hand, the funds themselves, particularly funds where SG contributions outweigh pension payments, are genuinely long term asset owners who can buy and hold most assets, almost indefinitely. This allows funds to invest in, and benefit from, assets which generate the highest long term returns but which may be subject to sizeable short term fluctuations in price.

On the other hand, members nearing (or in) retirement have shorter time horizons and may need to sell assets in the near-term to meet their income needs.

In addition to this, members at this stage of life will be close to the peak of their accumulated savings and at their maximum exposure to the nature of investment returns. For these members, large portfolio drawdowns are more damaging to their retirement readiness compared to young members still accumulating assets. Combined with increased loss aversion at older ages, investors tend to sell out of equities in times of crisis compounding the impact of negative returns with poor behaviour[1].

The two factors above suggest there is merit in an investment strategy which sacrifices some portion of returns in good years, for a substantial benefit in times of crisis. This is conceptually the same as insurance which is commonly purchased for the risk of a house fire or crashing a car. We are accustomed to sacrificing some money regularly; in the event nothing bad happens, taking comfort that our insurance will cushion our finances when something bad does.

EXPERIENCE TO DATE

The market fallout from the COVID pandemic has tested a wide range of risk management strategies. Given the nature of these types of approaches, which provide benefits under environments that are both rare and extreme – it is vital that the overall intent of the approach as well as the performance expectations in both up and down markets, are clearly and regulary communicated. This is particularly important for Superannuation funds where the pressure and temptation to focus on relative performance, can be acute.

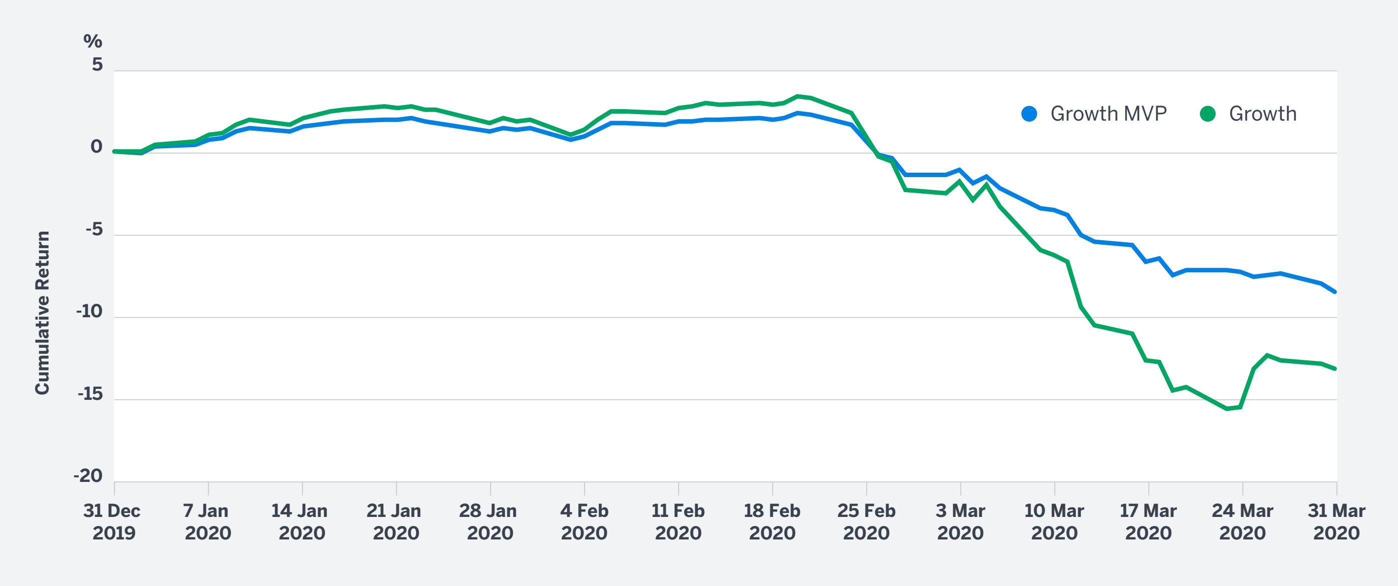
In the case of the strategy implemented by Milliman on behalf of Maritime Super, performance during the recent market crisis has been well aligned with the analysis and expectations of the fund and its trustees.

While this is largely due to the nature of the risk management strategy and the analysis to support the approach, considerable time and effort to assess the systems and operational integrity of Milliman was also required to provide comfort of the ability to implement and execute the approach through stressed market conditions.

The performance of the risk management strategy since the start of 2020 is illustrated below for Maritime Super's Growth MVP[2] option and has been plotted alongside the standalone Growth option. During this volatile market period, the risk management strategy enhanced Growth MVP returns were 5% better compared to the underlying Growth option. As an added benefit, this type of risk management strategy generates cash daily as markets fall, generating liquidity for the fund.

Similarly, Maritime's Moderate Option outperformed a benchmark balanced fund by 2.2% during the first quarter of 2020[3].

Figure 2: Growth and Growth MVP Q1 Performance



MEETING EXPECTATIONS & MANAGING TRADE-OFFS

Importantly, Milliman's investment philosophy and approach with its history on managing institutional liabilities, focusses on transparency, liquidity, and robust operations. Inevitably, choosing to implement a risk management solution involves a range of trade-offs given there are no "free lunches" or perfect solutions when it comes to investing and managing risk.

In consultation with Maritime Super, the risk management strategy used for their funds was tailored to reduce the exposure to equities in extreme scenarios with the goal of reducing portfolio falls by up to 50%.

This is illustrated in the diagram below by comparing actual and simulated performance over thousands of market scenarios. Actual performance figures are plotted alongside expectations to demonstrate how performance can be monitored (relative to those expectations).

This approach can assist with an understanding of what is achievable, and guide the tailoring of strategies to balance the amount of downside protection alongside its cost, which is paid in rising markets.

Figure 3: Simulated Maritime Super Growth MVP return expectations[4]

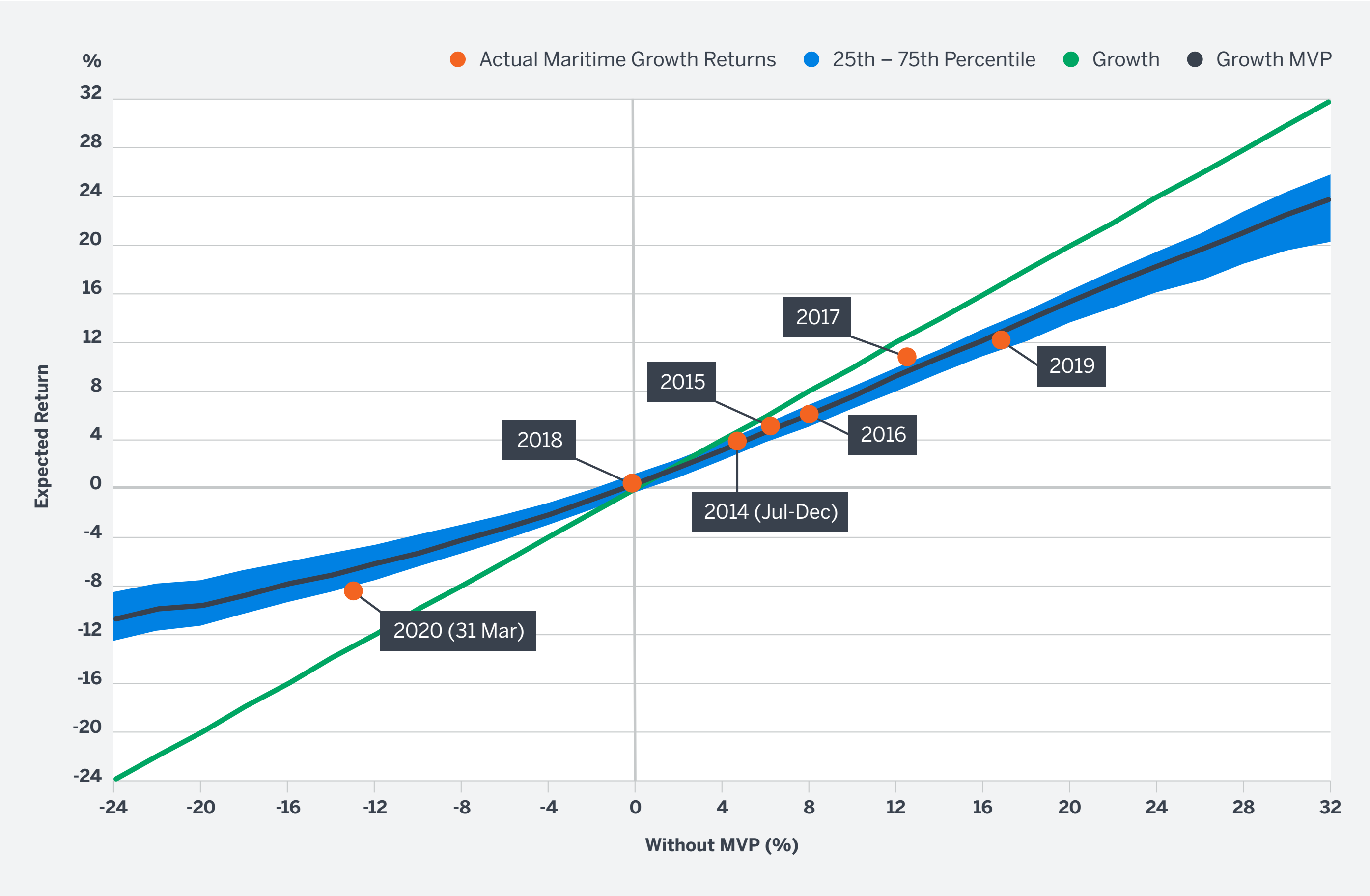


Table 1: Simulated Maritime Super Growth MVP return statistics[5]

	GROWTH	GROWTH_MVP
Average Return	8.7%	7.1%
Volatility	12.4%	7.6%
VaR 99.5%	-33.1%	-14.3%

SOME REASONS FOR NOT MANAGING RISK

Milliman's experience in developing and refining these types of risk management strategies has evolved, initially over decades working with global life insurers and since the financial crisis in 2008 with fund management firms, pension funds and financial advice groups.

For insurance organisations or funds with defined benefit liabilities, managing market risk is a business necessity driven by a need to protect balance sheets and minimise earnings volatility during times of market turbulence.

In the wealth management sector, risk management is less common and not necessarily top of mind when it comes to the governance and decision making structures around which portfolio construction is determined. This can be exacerbated through the prevailing frameworks through which fund performance is measured and ultimately how investment managers are rewarded.

In an environment where peer relative performance is a key determinant of behaviour, playing the odds leaves a blindspot to the ability for portfolios to navigate low frequency events, no matter how significant they may be.

Implementing a risk management strategy requires asset allocators to take a position which is likely to be at odds with their peers, detach themselves from relative benchmarks, and focus on member returns as they apply to retirement outomes. This also comes with an acceptance of sacrificing performance within market scenarios, where protection is not required. All of this takes strength of conviction during persistent bull markets but it ultimately benefits members when a crisis does hit.

REBUTTAL

In retrospect, most investors would happily sacrifice a modest haircut to performance during bull markets, in exchange for a significantly softer fall during a bear market.

When taking into account member objectives as well as return targets, our experience demonstrates that this is the true value of risk management.

For the benefit of members, asset owners should weigh up structural concerns such as peer risk or other reporting and consider the use of a range of risk management strategies, which can help to provide a smoother journey through market cycles.

SUMMARY

As we navigate these challenging times in the financial markets as well as day to day life, we recommend balancing long term return objectives with short term risk and implementing the appropriate strategies to stay invested through all market cycles. This will require;

1. Funds to assess, agree and adopt an approach with a focus on the risk to member outcomes.
2. Trustee eductation as well as the development and implementation of an appropriate governance framework.
3. Clear and transparent communication with members and other stakeholders to set and manage expectations.

REFERENCES

1. https://www.investmentmagazine.com.au/2020/03/unisuper-members-switch-2-billion-into-cash/
   and
   https://www.professionalplanner.com.au/2020/03/sunsuper-sees-overwhelming-flow-of-unadvised-members-flocking-to-cash/
2. Growth MVP invests in units of Maritime's Growth option, cash and futures.
3. Benchmarked to APRA's Standard Reference Portfolio for a comparable asset allocation to Maritime Super Moderate.
4. Based on 150,000 annual returns generated from 5,000 30 year real-world stochastic scenarios from Milliman's Economic Scenario Generator.
5. Average annualised volatility of weekly returns, calculated from 5,000 30 year real-world stochastic scenarios.

Key Contacts

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