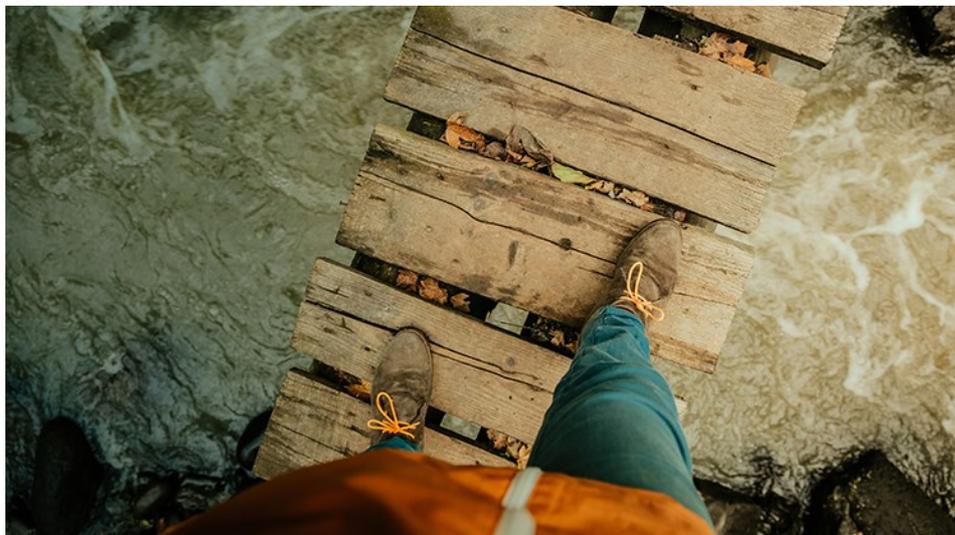


YOUR THIRD LAYER OF DEFENCE: PORTFOLIO PROTECTION



PERPETUAL INVESTMENTS

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Australians are living longer and our superannuation system is widely considered one of the best in the world. Logically, people who are living longer should expect to work longer. To be sure, the Australian government wants us to be self-funding for as long as possible, especially with the high medical costs of our latter years and the demographic challenges of an ageing population seeking government assistance. We should want this too. We should all aspire to maintain our financial independence and guard our standard of living long into retirement. However, for many of us, circumstances may conspire against us living happily, healthily and wealthy ever after.

The Australian Bureau of Statistics¹ has reported that, among men and women whose final job was held in the last 20 years, 19% of men and 14% of women ceased work because of 'own sickness, injury or disability' and approximately 2% of men and 5% of women to look after an 'ill/disabled/elderly person'. A further 9% of men and 5% of women ceased work because they were 'retrenched, dismissed or no work available'. This means almost a third of people ceased work due to circumstances outside of their control. So, whilst it makes sense for people to work for as long as

possible, this might not always be possible.

One of the lasting impacts of the global financial crisis is ultra-low interest rates. If you avoid risk today, your returns will almost certainly be low, and potentially lower than inflation. This means you need greater certainty that you can continue working longer to make up the shortfall. Alternatively, if you take more risk today in the pursuit of higher returns, there is the possibility of being even worse off.

How do you protect yourself from the unknown without sacrificing your future living standards for certainty?

PROTECTING AND GROWING WEALTH: A DELICATE BALANCING ACT

That is where the finance industry, working together, can add significant value. Financial planners help solve their clients' financial problems. Solving the problem of growing your wealth at the same time as protecting it has never been harder than in the current low interest rate environment, and the difficulty of this task is arguably compounded by the widespread use of traditional risk profiling of clients. Risk profiling is underpinned by assumptions of market returns and average retirement ages which fall short of the realities of investing and of life.

“Never forget the six-foot-tall man who drowned crossing the stream that was five feet deep on average. It's not sufficient ... to survive on average. We have to survive on the bad days.” — Howard Marks

Market risks change and people are individuals, not statistical averages. Both need careful attention and that is why financial planners in greater numbers are turning to real return funds; where there is close alignment between portfolio construction and what is important to the client.

SURVIVING THE BAD DAYS

One of the most important aspects of building portfolios is establishing the time horizon and the impact of cash-flows (either contributions to or withdrawals from your savings pool). Typically, the longer your investment time horizon and tolerance for short term volatility, the less diversification and portfolio protection is required. (There are exceptions to this generalisation.) It is vital to take a longer term view when your biggest asset is future income and your focus, quite rightly, is on building your career. Time in the market, dollar cost averaging, compound interest and the earnings growth of companies are powerful allies.

This begins to change as your ability to recover from losses starts to diminish around the lead up to retirement. Balancing **sequencing risk** and **longevity risk** is crucial. As you enter your 50s, with retirement likely still some way off, your assets are much larger and decisions need to be made around protecting what you have built with prudently growing it to ensure it lasts for as long as possible.

How can you be certain of your time horizon if **one in three people** cease working prematurely due to circumstances out of their control?

Did you know? A bear market is a market in which losses exceed 20%.

Extreme market behaviour is more common than perhaps many people realise. There have been seven bear markets in the US stock market over the past 50 years. Bear markets can be very detrimental as one might be forced to sell at the bottom – because of emotions, poor health, changing family circumstances, needing to fund living expenses in retirement or by being caught between jobs – and this turns a paper loss into a permanent loss. This is the real measure of “risk” and it is much more nuanced and complicated than measurements captured in risk profiling tools. Managing the risk of a permanent loss has never been more important for those seeking financial security.

Managing risk, rather than avoiding risk, is crucial to living a comfortable retirement for as long as possible.

We live in an increasingly complex world. So much so that it exceeds our capacity to fully comprehend it. At any given time, there are an incalculable number of variables which impact financial markets. Every action by a financial market participant or policy maker has a consequence; each consequence has another consequence, and so on. The second and third order effects are unknowable from today's perspective irrespective of the amount of resources dedicated to the task. The future is therefore a range of possibilities. It is our job as portfolio managers to understand a range of probable portfolio outcomes and to construct a portfolio which can withstand extreme market events. This is very different to confidently proclaiming to know what **will** happen.

Our four quadrant approach to portfolio construction means we always consider the best way to manage the downside.



Managing the probability of loss takes many forms. The easiest way is to ensure that there is a sufficient 'margin of safety' in the price we pay. This means we establish what an investment is worth and seek to pay significantly less than this price. After a bear market, the margin of safety tends to be very wide for a variety of different asset classes – equities have low valuations, credit spreads are wide, while government bond yields are typically expensive. Preferring equities and credit over bonds does not mean that you are necessarily building a 'riskier' portfolio because you are being rewarded handsomely for the risk you are taking.

Towards the end of the market cycle there is little reward for the risk. Generally equity valuations are expensive and credit spreads are tight. By contrast, bond yields are higher (than in a bear market) as investors extrapolate economic growth and demand a real return over inflation. Usually bonds offer protection from the end of the market cycle.

The cycle we are in today is somewhat different. Government bond yields are low at the same time that equity valuations are elevated and credit spreads are tight. This is the conundrum created by ultra-easy monetary policy.

BOND YIELDS ARE LOW AND COULD BE THE SOURCE OF PORTFOLIO RISK

The traditional approach to building multi-asset portfolios is to diversify risk by investing in bonds to offset the volatility of equities. Falling sharemarkets are typically associated with a weak economy, declining inflation and heightened risk aversion. Bonds typically perform well under this scenario, as bond holders receive a fixed payment stream irrespective of economic conditions; making them a reliable part of the portfolio. Therefore, a combination of growth assets (i.e. shares) and defensive assets (bonds) has the potential to deliver more consistent returns.

This portfolio approach is not a recent phenomenon, with bonds having been a steadfast diversifier of equity risk since 1900. Indeed, the total returns of the Australian sharemarket and Australian bond market have both been negative in only five of the past 116 years (1951, 1952, 1973, 1981 and 1994).

There were years of negative 10-year government bond returns as yields rose (such as 1912, 1920, 1980, 2009 and 2013) but these were associated with positive equity markets, and negative years in shares (including 1901, 1915, 1929, 1930, 1941, 1974, 2008 and 2011) which were offset by positive bond returns.

However, the fixed payment stream of bonds which until now has been a source of reliability, is now the asset class' weakness. With record low bond yields, investors are receiving lower income than ever before, and face the risk of interest rates rising leading to capital losses. A 1% rise in interest rates has the potential to erase three years of income at current yields.

However, there is potentially a more insidious impact of rising bond yields. We may experience a time when bonds are no longer a diversifier of portfolio risk, and are instead the source of risk. Higher bond yields increase borrowing costs for companies, increase mortgage repayments for individuals and possibly undermine stretched valuations of equity markets. In fact, many seemingly unrelated asset classes (infrastructure, property, equities, etc.) have valuation processes which use bond yields as a starting point to discount future cash flows, making them susceptible to higher bond yields.

Robust portfolios must be able to cope with low returns from bonds, negative returns if bond yields rise from here, **and** potentially higher correlations between bonds and other asset classes, including equities.

UTILISING THE FULL SUITE OF DOWNSIDE PROTECTION STRATEGIES

The best investments are ones that can do well under a number of scenarios. This requires a thoughtful understanding of what **could** happen, rather than building confidence about what you think **will** happen.

Minimising downside risk is, in part, achieved by having a better breadth of investments and balance of risks. Explicitly managing valuation risk (avoiding expensive asset classes) also helps to reduce volatility. However, this approach can lead to investing large amounts in cash when valuations are unattractive, or could unintentionally lead to a higher concentration of cheap markets with large macro risks. Investors need to expand beyond more than just utilising cash and bonds to protect from a market downturn.

At Perpetual, while we are prepared to build up cash and also take valuation-driven positions in equity markets with macro or political risks (because we believe the returns on offer more than compensate for the risks) and we are also prepared to implement explicit portfolio protection. This is much broader than simply using fixed income. It can include equity put options, equity hedges, buying currencies like the US dollar or Japanese Yen, or other positions which are likely to be negatively correlated in a market 'risk off' scenario to the equity and credit risk within the portfolio.

Options are simply a portfolio tool to enable a portfolio manager to structure views, sometimes with greater upside than downside. If an option expires out of the money, the loss is limited to the amount paid for the option. This does not have to be a poor outcome if the alternative was to crystallise greater losses on an outright position. The overall cost of the option needs to be thought of in conjunction with what other action might have been taken instead, such as buying the underlying market outright.

WHEN DO WE CONSIDER BUYING OPTIONS?

We consider buying options when:

1. The market is complacent (therefore the risk of a bad market reaction is high) and option protection is cheap

It is easier to recognise where you are in the market cycle than predicting when you will move from one stage of the market cycle to another. A mature bull market is evidenced by the lack of valuation opportunities and often manifests in the underperformance of “value” managers who cannot bring themselves to pay lofty valuations for high expectations of future growth. Other signs include the increase in corporate leverage. The worst loans (tightest spreads) are often made at the best of times. Market volatility can also be lower than normal and investors are tempted to take on more risk as returns start to temper.

Importantly, we do not seek to protect the portfolio from short term events such as Brexit or the election of President Trump. These events are typically widely followed, which means that market are very alert and options can be quite expensive.

We continually monitor the pay-off of a variety of options to ensure that the risk reward is in our clients’ favour. We look at both equity options and currency options.

2. It is a part of a whole of portfolio view

Taking a risk on a single position can be either mitigated or exacerbated by positions elsewhere in the portfolio. It is important that these interactions are taken into account. We take time to look at the main risks to the portfolio achieving its investment objective and investigate ways to insulate the portfolio from key risks.

Importantly though, while we buy option protection, we never write option protection. To do so would expose our investors to a negative risk to earn a small amount of premium. This is the opposite of what the Perpetual Diversified Real Return Fund is designed to do.

Bought options are a useful portfolio management tool, but are not the only way to manage extreme risks.

THE THIRD LAYER OF DEFENCE IN ACTION: MANAGING THE RISK OF CHINA CREDIT CRISIS

In the past four global business cycles there has been a large leverage build-up and concurrent asset price boom, which sparked a tightening cycle by central banks; ultimately leading to an economic downturn. Over the past eight years there have been two key examples of leverage build ups:

1. China – Where economy-wide debt has doubled since 2008 and where debt as a share of the economy is as large as economies with living standards three times higher, and
2. The Australian housing market – Where household debt as a share of disposable income is now a record high of 189% – the largest in the developed world.

The reversal of either or both of these debt expansions could have severe ramifications for the performance of the Australian economy and the wealth of all Australians. This is not to suggest that we expect this to happen imminently. Our role as a fund manager is about how skilfully we manage the risks of our portfolios, not to predict the exact moment when those risks will happen. All markets experience credit cycles and we expect that China will be no different. Similarly, the Australian economy has had a record run of years without recession (25 years), but there will be another recession and it is crucial to manage that risk.

The Diversified Real Return Fund is positioned to achieve its CPI +5%p.a. objective if

China avoids a hard landing. However, as prudent risk managers, we must construct a robust portfolio which will survive the bad days – and this, should it occur, would be one very bad day for markets.

THE RISK OF A CHINA CREDIT CRISIS IS INCREASING

“Consider the past quarter century: a credit boom in Japan that collapsed after 1990; a credit boom in Asian emerging economies that collapsed in 1997; a credit boom in the North Atlantic economies that collapsed in 2007; and finally China. Each is greeted as a new era of prosperity, to collapse into crisis and post crisis malaise.” – Martin Wolf, Financial Times.

China’s growth in investment was funded by rapid credit expansion in China’s banking system, which grew from \$3 trillion in 2006 to \$34 trillion in 2015. The Chinese banking system is now 340% of Chinese GDP. In 2007, just prior to the start of the global financial crisis (GFC), the US banking system was 175% of US GDP. Chinese banking officials have little experience in judging credit risk, and loan decisions are often political decisions by the state. As a result, loans are being made with little regard to the return on investment of the projects they supported which adds to excess capacity and lowers earnings per share.

Last year, China used an aggressive build-up of leverage (which was equivalent to 30% to GDP) to stave off a sharp economic slowdown. This year the credit impulse, or the growth in the growth of debt, has turned negative (although growth so far is holding together, because they are not deleveraging).

Today, China is at a point where its banking system is struggling to support such massive growth and the strong Renminbi has undermined the competitiveness of China’s export economy.

Likely policy responses will be some combination of the following:

1. Cut interest rates to zero and let the banks ‘extend and pretend’ – more capital will go abroad putting pressure on the currency, which would cushion the economic impact of any credit drain
2. Form a bad-bank funded by the Peoples Bank of China (PBoC)
3. Use foreign currency reserves to recapitalise the banks – which puts downward pressure on the currency
4. Print money to recapitalise the banks – which again, puts downward pressure on the currency
5. Fiscal stimulus – this was the response last year and may occur again. Ultimately, this puts downward pressure on the currency.

Within the Perpetual Diversified Real Return Fund, we are managing the risk of China's credit crisis for our investors today as follows:

(Note: the positions highlighted in italics are also a hedge for an Australian housing market collapse) within the Diversified Real Return Fund by:

- Being short the Renminbi (RMB) versus the US dollar (the RMB is an administered currency. A large expansion of the PBoC would likely result in a 15-25% devaluation of the RMB)
- Holding a long dated put option on the Australian dollar (the AUD could be