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Capital Preservation for Australian Investors

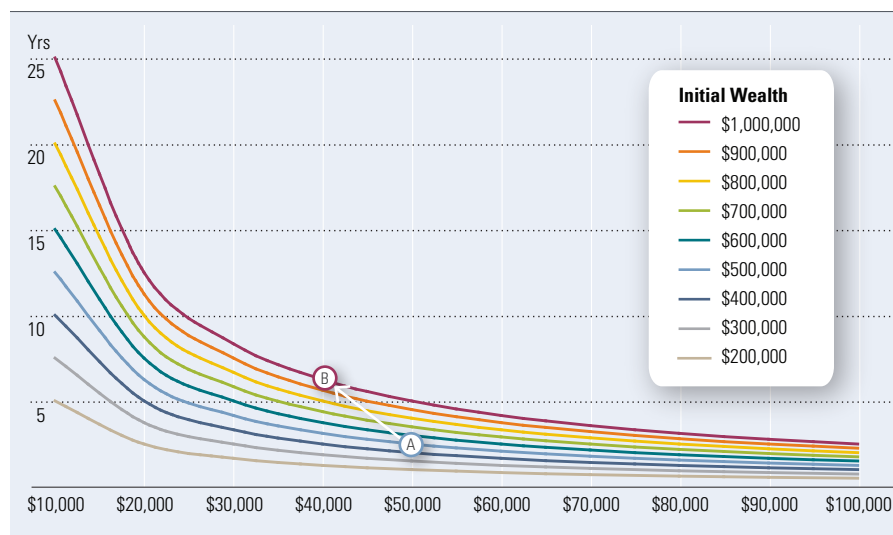
Avoiding large losses remains a key element of building wealth, as many of the world's foremost investors have long emphasised. In this Ibbotson Insight, we look at why capital preservation matters, what causes losses, and the importance of fundamental diversification. We find that economic recession is the major fundamental risk that causes losses for Australian investors. Adding assets that are not driven by economic growth can reduce this risk, providing they are not overvalued. These include a global diversified portfolio of insurance-linked securities, shares in regulated utility companies, and global trading strategies such as global macro hedge funds and managed futures.

Why Does Capital Preservation Matter?

A large sustained loss of capital is the primary risk that affects all investors, whether they are saving to fund a future liability or drawing down on savings in retirement. Sustained losses occur either when the price of investments fall and fail to recover (such as the case with shares in bankrupt companies), or when investors cut their exposure after a fall in price and miss out on any subsequent rise in price. The latter happens when investors take on too much debt, take on more risk than they can tolerate, or have a short-term investment horizon.

Heavy losses take many years to recoup because very high rates of return are needed to restore the original capital. For example, it takes a 33.0 percent gain to recoup a 25.0 percent loss, and a 100.0 percent gain to recoup a 50.0 percent loss. Large losses have a big impact

Figure 1. Years of Savings Required to Replace a 25.0 Percent Loss.



Source: Ibbotson Associates Australia. The vertical axis is the number of years of savings required to offset a 25.0 percent loss. The horizontal axis is the amount of annual savings investors can use to rebuild their wealth. Each line represents an initial portfolio value (ranging from \$200,000, the bottom line, to \$1,000,000, the top line).

on lifestyle, forcing investors to save longer to reach their goals, or to cut spending. Investors approaching or in retirement are especially vulnerable as the impact gets bigger as the value of the investor's portfolio increases, and as the amount they can save decreases. For instance, an investor with a \$500,000 portfolio who saves \$50,000 a year takes two-and-a-half years to save enough to replace a 25.0 percent loss of capital (point A on Figure 1). This rises to 6.3 years for a \$1,000,000 portfolio and slightly less savings of \$40,000 (point B).

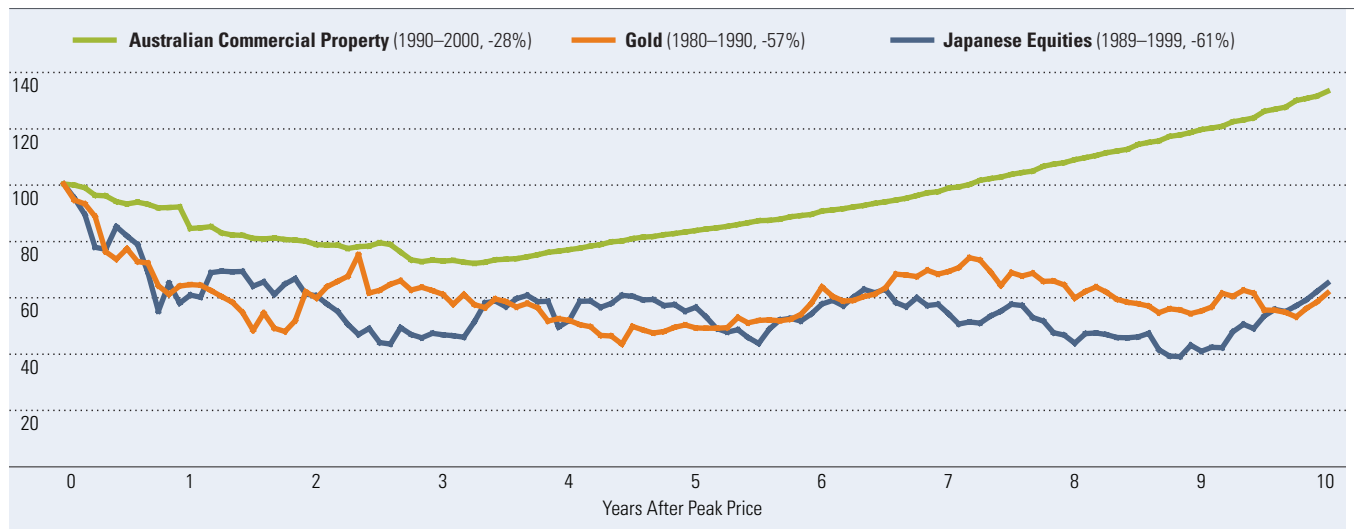
Here we are assuming that the investments do not recover their losses, and that any investment income they provide is included in the estimate

of annual savings. This might seem a pessimistic scenario, but it is consistent with historical returns of widely-held investments with heavy losses. Recent examples include Japanese equities, which still remain below their 1989 peak; gold prices, which remained below their 1980 peak for 26 years; and Australian commercial property, which took seven years of income and capital gains to recoup losses experienced after prices peaked in 1990 (Figure 2).

Valuation Risk

Heavy losses come from large falls in the prices of assets, which in turn can be broken down into valuation and fundamental components.

Figure 2. Historical Examples of Large Investment Losses.



Source: Ibbotson Associates Australia. All series are total return indices in local currencies rebased to 100. Figures in brackets refer to time period and peak-to-trough losses.

The first is simply how much an investor is prepared to pay for an investment in terms of current and future income, the current assets, or some other benefit they expect to receive. We can gauge this by tracking relevant valuation metrics over time such as the price/earnings ('P/E') ratio for shares. If investors decide to pay less, then a lower P/E will apply.

The risk of large losses caused by a fall in valuation levels ('valuation risk') stems from bias, overconfidence, and emotion hardwired into our behaviour, as demonstrated by both behavioural finance studies (summarised neatly by James Montier in *The Little Book of Behavioural Investing*) and the well-documented history of investment booms and busts (for more details, refer to Charles P. Kindleberger's classic *Manias, Panics and Crashes*). All asset classes are vulnerable to overvaluation, including unlisted assets such as private equity and 'defensive' investments with relatively low fundamental risk, such as government bonds. The key insight here is that there is a link between current valuation levels and future returns. Future returns are higher when valuation levels are low, and lower when valuation levels are high. An investor's best defence against valuation risk is to avoid owning overvalued assets, and to reduce exposure once valuations reach unsustainably high levels. The challenge in applying this

approach is to identify suitable valuation measures that provide a reliable guide to future changes in asset prices, and to define 'overvaluation' triggers for taking action.

Fundamental Risk

The second 'risk' that can cause large losses is a drop in cashflows, loss of investor rights, or any other change that reduces the benefit investors derive from owning an investment. These 'fundamental benefits' include the payment of dividends, rents, interest, and influence or control over an asset. We use the term 'fundamental risk' to describe the risk of a loss caused solely by a drop in these benefits. This concept applies to any asset that generates an income stream. Fundamental risk has often been the key driver of large losses, as occurred for US shares between 31 December 1999 and 31 December 2009, based on MSCI US Equity Index data. Over this 10-year period, share prices fell by 27.0 percent, caused by a 21.0 percent fall in earnings per share and a seven percent fall in the P/E ratio. Fundamental risk is higher for assets which have very volatile income streams.

In Australia, local shares remain the cornerstone of most portfolios, and recession is the dominant driver of big falls in corporate earnings. Over the past 50 years, there have been five occasions when Australian corporate earnings have fallen

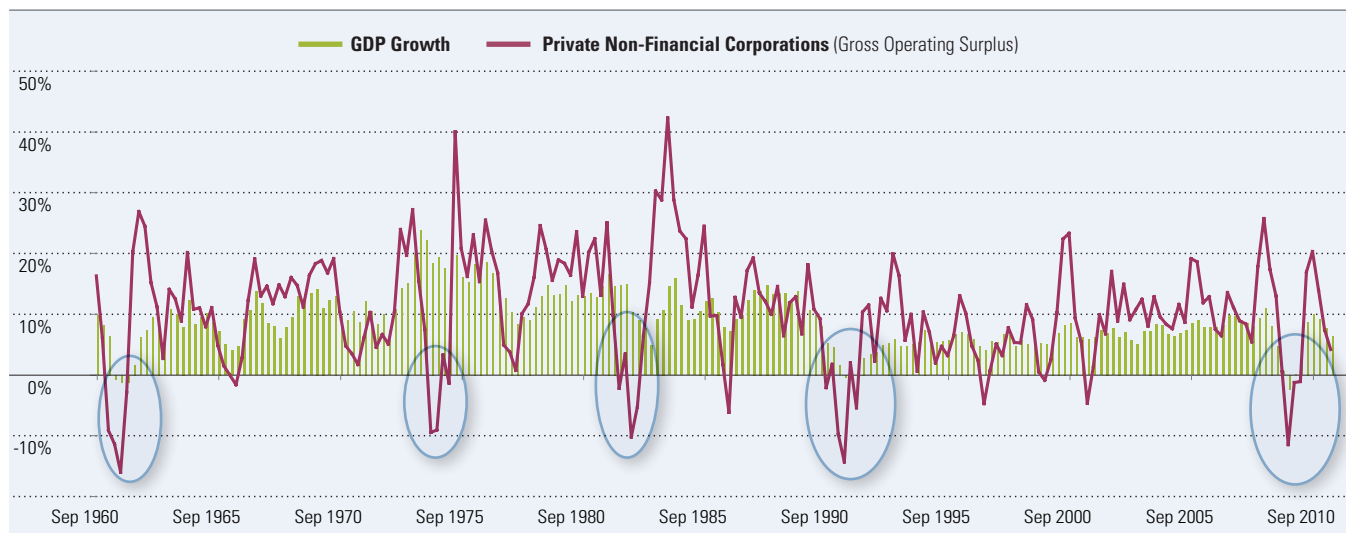
by 10.0 percent or more (Figure 3).

On each occasion there has been a recession or dramatic decline in the rate of economic growth. The key fundamental risk facing Australian investors is therefore an economic recession.

Fundamental Diversification

An investor's first line of defence in tackling fundamental risk is to hold a broad spread of investments with different fundamental risks. For Australian investors, this means investments with underlying cashflows that are not driven by economic growth and will not fall markedly during economic recession. They do not need to be 'risk-free', they just need cashflows driven by factors other than Australian economic growth. Government bonds are effective diversifiers if the governments are willing and able to pay the interest and principal at maturity. Like any borrower, governments can default, and there is a long history of heavily-indebted countries defaulting, so investors need to be selective. (For more details, refer to chapter six of Carmen Reinhart and Kenneth Rogoff's *This Time is Different: Eight Centuries of Financial Folly*.) Cash has the virtue of preserving capital (providing the issuer repays), but returns are lower in a recession, following the path of interest rates. Returns from cash can stay below the rate of inflation for many years, something Australian investors have not experienced for

Figure 3. Australian Economic and Corporate Earnings Growth %pa, 1960 - 2011.



Sources: Ibbotson Associates Australia, Australian Bureau of Statistics, seasonally-adjusted in current dollars. Changes are for rolling four calendar quarter periods.

many decades. International shares offer some diversification benefits, but these have become limited over time because recessions now occur at similar times here and in the major global economies, due to the globalisation of trade and capital flows and common macroeconomic policies. Commercial property has limited diversification benefits despite the smoothing of cashflows created by longer-term leases and inflation adjustments. Recessions put downward pressure on rental income, as consumers spend less, affecting retail sales, while companies shed staff or defer expansion, thereby reducing demand for office space.

Traditional asset classes offer limited diversification benefits, as the fundamental risk of international shares and commercial property is the same as Australian shares (economic recession). Even returns from cash are lower in recession, while investors in government bonds face rising credit risk, given the high and rising trajectory of sovereign debt in many countries. This puts the onus on investors to look for other investments that can diversify the fundamental risk of economic recession. Adding these to a portfolio can reduce the risk of large total portfolio losses, providing the assets selected are not overvalued. The following outlines examples of the diversifiers Ibbotson uses for its clients.

Effective Fundamental Diversifiers

Insurance-Linked Securities

Insurance-linked securities ('ILS'), also known as catastrophe bonds, have unique fundamental risks. These securities are structured as bonds with a principal repayable at maturity and income payments set at a margin above short-term interest rates. They differ from bonds in three important ways. The first is that if the insured event occurs – hurricanes, earthquakes, and other extreme events meeting specific criteria – investors may not receive some or all of the income payments and principal, resulting in a potential loss of up to 100.0 percent. The second is that the amount of the income payments is driven by the supply and demand of insurance for these types of events. Income payments are higher when insurance premia are on the rise, typically due to the insurance and reinsurance industry having too little capital available to offer insurance, relative to the demand. Income payments are lower when insurance premia are on the decline, typically when there is an excess of insurance and reinsurance industry capital relative to the demand for insurance. There is also a link with short-term interest rates, as coupons are set as a spread above the benchmark London Inter-Bank Offer Rate, so rising interest rates have a positive impact while falling interest rates have a negative

impact on returns. However, changes in interest rates have not been the dominant driver of returns.

The fundamental risk of ILS is the occurrence of extreme events that meet the specified conditions for a payout, as this is what causes large losses. (Note that the excess supply of insurance capital dictates the reward for taking on this risk, but does not cause large losses.) Recessions do not cause these extreme events to occur, and these events do not cause global recessions, although they can cause local recessions, as the Tohoku earthquake in Japan did in 2011. This means that large losses on an equities portfolio seldom occur at the same time as large losses on insurance-linked securities. Another attractive feature of the asset class is that earthquakes in one region are not known to cause hurricanes and wind storms in other regions, and *vice versa*. The risk of large losses for an ILS portfolio can be reduced dramatically by diversifying across different regions and different perils. In other words, diversification within the asset class is very effective at reducing the risk of loss. From a total portfolio perspective, ILS is attractive because the factors that cause losses in equities and bonds do not cause losses in ILS, so having them in the portfolio reduces total portfolio losses.

Infrastructure

Another effective diversifier is a global diversified portfolio of shares in regulated utilities. Utilities provide essential community services. The majority of those privately-owned are electricity and gas companies. These range from electricity generation (mainly coal-, gas-, hydroelectric-, and nuclear-powered), to the transmission and distribution of electricity or gas to end users (transmission towers, electricity poles and wires, and gas pipelines), and energy retailing (billing and directly servicing end users). Integrated utilities are involved in several or all of these parts of the value chain. Corporate profits for the natural monopolies – including transmission and distribution plus some integrated utilities – are stable, reflecting the essential nature of the service and the lack of competition. These are heavily-regulated by governments, which set allowable rates of return on capital and have a broad range of powers including authorising price increases and mandating the use of alternative energy sources for generating electricity. The fundamental risk of these regulated utilities is in fact adverse government regulation rather than economic recession. While recession does have some impact (companies are also consumers of

power), governments can directly control the return on capital, so their impact dominates. This 'regulatory risk' is the main risk that distinguishes these investments from equities and bonds and the reason they provide diversification from a total portfolio perspective.

Hedge Funds

Certain types of hedge fund strategies can also be very effective diversifiers for a portfolio holding equities and bonds. Strategies that do not rely on significant outright exposure to equities, bonds, or credit, and that hedge against extreme market scenarios are the best diversifiers, in particular global trading strategies such as diversified global macro hedge funds. The fundamental risk here is poor manager selection, as outcomes are far more dependent on the manager than for other active strategies that maintain a substantial net long exposure to asset classes. Returns from trend-following strategies (such as Commodity Trading Advisors ('CTAs') and managed futures) are not driven by economic growth, and can perform well during recessions, providing there has been a clear trend for them to follow, rather than trendless highly-volatile markets.

Conclusion

Heavy sustained losses of capital are seriously damaging to investors' lifestyles, forcing a cut in spending, and delaying or even putting out of reach the achievement of financial goals including retirement. Large losses can occur when overvalued assets are de-rated back to more sustainable levels ('valuation risk'), or when the underlying cashflows of an investment fall heavily ('fundamental risk'). The key to managing valuation and fundamental risk is to avoid overvalued assets and diversify across investments whose underlying cashflows are driven by different factors, and hence do not fall heavily at the same time. For Australian investors, recessions are the major fundamental risk, because of our high exposure to local equities, the drop in corporate cashflows during recessions, and the similar fundamental risks of international shares and commercial property. Even cash is not immune to recessions, as returns fall when interest rates are cut and can stay below inflation rates for long periods. Investors can diversify this fundamental risk by allocating to bonds of governments with serviceable amounts of debt, diversified global portfolios of insurance-linked securities, shares in regulated utilities, and global trading strategies such as global macro hedge funds and CTAs. ■

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