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## **Achieving a Successful Investment Experience....Certainty from Uncertainty**

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### **Introduction**

All investors have their own definition of a successful investment experience but inevitably individual investor returns are driven by the success of free market capitalism.

Whether an investment is debt in the form of deposits or bonds, residential or commercial property, public or private equity, or a combination of each asset class, capitalism provides a return for each investor which is based on the risk the investor is prepared to take.

This paper will provide investors with some simple, well proven strategies to follow that can bring a greater degree of certainty to the uncertainty of investing and deliver a successful investment experience.

### **Investor Motivation**

Every investor places their money into investment assets with one dominant motive....profit.

Whilst some investors display irrational behavior from time to time, all investors pursue returns from their investments based on their perception of the potential return and risk. Investors only take greater investment risk if they expect to be rewarded for the risk they take.

However, many investors buy investment assets without understanding the risks associated with those assets. Evidence supporting this notion appears in our media virtually each day.

### **Understand Asset Classes, Their Risks and Their Expected Returns**

Before investing, investors need to understand the risks and returns of each asset class and any particular asset they are considering buying. The underlying risk is not always immediately apparent to the untrained observer.

- For instance cash deposits (such as bank bills, at call common funds and cash management trusts) are the least volatile asset class but as one might expect, over long periods cash provides the lowest return.

Fundamentally cash is a short term loan of your funds to another party who pays interest charges for borrowing your money.

- Interest securities such as term deposits, mortgages, government bonds and corporate bonds of a longer term have greater investor risk and as such over the long term have a greater expected return than cash. Whilst still considered a safer type investment, many investors are surprised to learn that bonds can lose value when interest rates rise sharply and even a pooled mortgage fund can lose value when loan defaults occur.

Here investors also lend their money to others but for longer periods of time in return for interest payments.

- Property, and the love of bricks and mortar, has long been a favorite with Australian investors. However, there is such a large variety of property for Australian investors to choose from such as property assets that are listed on the stock exchange as well as the physical property market. Then there is also International listed & physical property.

Each property investment must be considered separately to fully understand the return potential and the associated risks. Questions must be asked such as: How sound are the tenants? How much demand exists for the type of property? Is the property in a growth area? Was it purpose built?

The answer to the questions above, along with others, will assist an investor to understand the prospects for a particular property investment. They will also determine the rental income and future capital growth of the property asset.

Based on research to date, property does not exhibit the same characteristics of fixed interest or equities. Best analysis to date of the risk & return characteristics of property suggest that it behaves like a hybrid of both debt and equity. (Fama Jnr 2004)

- Finally, investors can invest in private equity (or private enterprise) or the public equity markets (share markets), both locally and internationally.

Equity markets have historically provided higher long term returns but with greater short term performance volatility, as will be demonstrated later in this paper.

Investors buying shares, or a managed share fund, are buying the future prosperity (or otherwise) of a company or group of companies. This is the most direct form of support for the free enterprise capitalist system an investor can undertake.

Within share markets, as with property, there is an enormous variety of choice available to equity or share market investors. Some people prefer only to buy the so called 'blue chips' because of their perceived safety, whilst at the same time, significant evidence exists that small company shares and value (unhealthy) shares have delivered higher returns in the longer term, albeit with greater volatility. (Fama 1982 and Fama & French 1991)

Many unsuccessful investment experiences have arisen from not fully understanding investment risks. Understanding investment risk provides a much greater probability of investment success.

### **Markets Work and They are Efficient**

In our era of advanced electronic telecommunications, all publicly available information is distributed almost instantly and thus the prices of financial assets very quickly attain their fair value. This means no-one is consistently able to gain an advantage over other market participants. One result of this fact is that for every above average investment manager, there is also a below average manager.

There may be, and there surely are, some investors and/or investment managers who seem to have an ability to predict the future prospects for particular assets which then go on to deliver extraordinary investment returns.

Who are they? Sadly, when it comes to investment managers, we don't know until history can show us and then it's too late, because superior performance rarely persists for long periods. (Carhart 1997, Quigley and Sinquefeld 2000, Davis 2001)

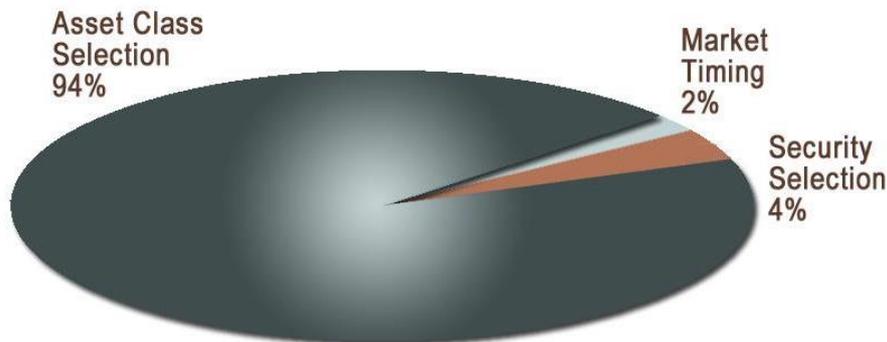
Whilst this author is not saying markets are perfectly efficient, a quote from Professor Eugene Fama from the University of Chicago seems apt, "...the extreme version of market efficiency is surely false but investors should behave as though they believe markets are efficient...".

## Portfolio Asset Allocation Determines Performance

In a much cited paper from Brinson, Hood & Beebower, which studied the results of 91 major US pension (superannuation) plans over 10 years, it was concluded that 94% of portfolio performance was due to asset allocation.

Only 4% was due to stock selection and only 2% was due to market timing.

Figure 1 – Graphic Representation of the Brinson Study



Source: Study of 91 large pension plans over 10 year period.  
 Gary P. Brinson, L. Randolph Hood and Gilbert L. Beebower, "Determinants of Portfolio Performance", Financial Analysts Journal, July - August 1986, pp 39 - 44:  
 and Gary P. Brinson, Brian D. Singer and Gilbert L. Beebower, "Revisiting Determinants of Portfolio Performance: An Update". 1990, Working Paper.

Further work by Roger Ibbotson and Paul Kaplan (2000), also concluded that portfolio performance was largely due to asset allocation.

Accordingly, this author's view is the process of assessing an investor's portfolio asset allocation should be comprehensive, robust and based on sound principles that include the investor's time frame for investing, tolerance for risk and return, individual financial objectives, investor experience, etc. If the investor's asset allocation has been derived in a sound manner, there should be little chance for surprise and a high probability of achieving a successful investment experience.

Asset Allocation is the most important decision in the design of any investment portfolio.

## Predicting Future Returns is Extremely Difficult

As the table below illustrates, people may look for patterns in the returns of asset classes but actual results tend to be extremely random. Forecasting the most profitable asset class from year to year may not be impossible but it is extremely unreliable.

Table 1 - Historical One Year Ranking of Asset Class Performance January 2001 – December 2014

|                | 2001            | 2002            | 2003            | 2004            | 2005            | 2006            | 2007            | 2008            | 2009            | 2010            | 2011            | 2012            | 2013            | 2014            |
|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Highest Return | Listed Property | Listed Property | Aust Equities   | Listed Property | Aust Equities   | Listed Property | Aust Equities   | Global F. Int.  | Aust Equities   | Global F. Int.  | Aust F. Int.    | Listed Property | Global Equities | Listed Property |
|                | Aust Equities   | Global F. Int.  | Listed Property | Aust Equities   | Global Equities | Aust Equities   | Global F. Int.  | Aust F. Int.    | Listed Property | Aust F. Int.    | Global F. Int.  | Aust Equities   | Aust Equities   | Global Equities |
|                | Global F. Int.  | Aust F. Int.    | Global F. Int.  | Global Equities | Listed Property | Global Equities | Cash            | Cash            | Cash            | Cash            | Cash            | Global Equities | Global F. Int.  | Aust F. Int.    |
|                | Aust F. Int.    | Cash            | Cash            | Global F. Int.  | Global F. Int.  | Cash            | Aust F. Int.    | Global Equities | Aust F. Int.    | Aust Equities   | Listed Property | Aust F. Int.    | Listed Property | Global F. Int.  |
|                | Cash            | Aust Equities   | Aust F. Int.    | Aust F. Int.    | Aust F. Int.    | Aust F. Int.    | Global Equities | Aust Equities   | Global Equities | Listed Property | Global Equities | Global F. Int.  | Cash            | Aust Equities   |
| Lowest Return  | Global Equities | Global Equities | Global Equities | Cash            | Cash            | Global F. Int.  | Listed Property | Listed Property | Global F. Int.  | Global Equities | Aust Equities   | Cash            | Aust F. Int.    | Cash            |

If predicting market directions is extremely difficult, then surely as Brinson and co found, selecting when to buy and sell individual assets (with the multitude of options available) is even less certain.

## Diversification Reduces Risk

In 1952 Nobel Prize Winner Harry Markowitz, proposed the concept of the efficient frontier of investment portfolio construction. Markowitz' work, which has stood the test of time, proved that genuine diversification of truly different asset classes reduces the performance volatility of an investment portfolio.

The performance stability provided by diversification is achieved simply because different asset classes (and indeed different assets) deliver positive and negative returns at different times. Diversification does not necessarily provide for higher returns, just lower volatility.

The table below provides one specific example of how diversification delivers lower volatility.

Table 2 – Diversification in Action with Equity Portfolios

| Portfolio Type    | Australian Shares (1) | International Shares (2) | 1/2 Australian & 1/2 International (3) | Asset Class Portfolio (4) |
|-------------------|-----------------------|--------------------------|--|---------------------------|
| Annual Return     | 11.39%                | 10.84%                   | 11.49%                                 | 13.31%                    |
| Annual Volatility | 17.13%                | 14.61%                   | 13.22%                                 | 13.12%                    |

- (1) This portfolio is represented by the ASX All Ordinaries accumulation index from 01/01/1980 to 30/6/2015
- (2) This portfolio is represented by the MSCI World share market accumulation index from 01/01/1980 to 30/6/2015
- (3) This portfolio is based on 50% of portfolios 1 & 2, with annual rebalancing back to the 50% weightings
- (4) Here the portfolio is based on more comprehensive diversification using Large, Value and Small cap stocks in each of the Australian and International portfolios, 50% invested locally and 50% invested internationally. See Appendix One - Note A

Each of the portfolios shown above are very broadly diversified with hundreds or even thousands (for international) of individual securities. The concept of the 'managed fund' is based on the concept of using diversification to capture a market return rather than speculating on the future prospects for a few individual assets.

## Risk and Fixed Interest Investments

In the fixed interest market there are two major risks to consider:

- **Term Risk:** the length of time an investor has agreed to lend (or deposit) their funds with the borrower (such as a bank, building society, credit union, etc).

The risk here is, the longer the term of your investment, the greater time available for interest rates to rise reducing the value or attractiveness of your investment.

and

- **Credit Risk:** reflects the potential inability of the organization to repay the investor when the funds are due for repayment due to financial distress.

The lower the credit worthiness of the borrower, the greater the chance they will not meet their obligations. Credit ratings such as AAA or BBB indicate a borrower's financial strength and hence their capacity to repay their debts.

In a traditional interest rate climate, the longer the term or higher the credit risk, the higher the interest payments (or income stream) available to the investor but the higher the risk of loss.

If a so called 'safe' interest paying investment offers a higher return than expected, scrutinize the term and credit risk very carefully and satisfy yourself that the associated risk is being adequately rewarded. If the promised return looks to good to be true....it probably is!

## Understanding the Equity Markets

Over short periods sentiment drives the equity markets due to investor pessimism or optimism. In the longer term it is driven by economics and the success of capitalism, all companies share prices eventually reflect the capacity of that company to deliver profits from the commercial activities of that enterprise.

In 1964 William Sharpe proposed his Nobel Prize winning theory, the Capital Asset Pricing Model which stated that the more volatile a stock was the higher the expected return.

Three other widely cited academic papers in the world of finance were authored by Rolf Banz, The Relationship Between Returns and Market Values of Common Stocks (1981), Professor Eugene Fama Snr, Efficient Capital Markets (1970) and Professor Fama and Professor Ken French, The Cross Section of Stock Returns (1992). In these three papers Banz, Fama and French clearly demonstrate that in the equity markets, around the world, investors are rewarded if they hold greater than a market weight of value (or unhealthy) company shares or small company shares.

Figure 2 – Size and Value Effect on Share Portfolio Returns



To most people, it seems intuitively obvious that small and unhealthy companies have a greater risk than large and healthy companies. Banz, Fama and French have proven that with this greater risk comes a greater expected return.

The work of Fama and French on the Value Effect has recently been supported, by the work of Kwag & Lee (2001).

(\*) BtM represents a company's Book Price (assets on the companies balance sheet) expressed as a ratio of the Market Price (share price multiplied by number of issued shares). A high book to market ratio indicates company in some distress or an unhealthy company, a low book to market usually represents a healthy or growth company.

## Risk and Returns are Always Related

An investor who chooses a low risk portfolio needs to be happy to accept low returns. There is no such thing as a reliable low risk – high return portfolio. History has shown over extended periods of time that the greater exposure to more volatile growth assets such as shares and property, the higher the average return.

The tables below illustrate two different measures of risk based on the past 24 years of market data. The tables compare four portfolios with increasing exposure to shares and property

Table 3 – Returns Compared to Performance Volatility

| Portfolio Type             | Conservative (1) | Moderate (2) | Balanced (3) | Growth (4) |
|----------------------------|------------------|--------------|--------------|------------|
| Average Annual Return (*+) | 7.75%            | 8.45 %       | 8.46%        | 8.38%      |
| Annual Volatility (#+)     | 3.76%            | 5.92%        | 7.90%        | 9.51%      |

(\*) Annual returns assume quarterly rebalancing to target asset allocation and market performance in each asset class.

(#) Volatility as measured by standard deviation.

(+) Measured using annual data from to 01/01/1990 to 30/6/2015.

It is obvious, the higher average return is achieved with greater volatility.

Table 4 – Returns Related to the Chance of a Loss in One Year

| Portfolio Type                            | Conservative (1) | Moderate (2) | Balanced (3) | Growth (4) |
|---|------------------|--------------|--------------|------------|
| Chances of a One Year Loss of Capital (+) | 1 in 14.3        | 1 in 9       | 1 in 5.5     | 1 in 5     |

(+) Measured using quarterly data from 01/01/1990 to 30/6/2015.

See Appendix One - Note B

For these same four portfolios, as higher average returns appear, so too the chance of one year loss increases.

So the greater exposure to shares and property, the greater the chance of higher returns but also the greater chance for capital losses and performance volatility.

One significant limitation exists in the above data. When an investor takes on a diversifiable risk, that is one which can be diversified away, it is not necessarily going to be rewarded. Just as Harry Markowitz proved diversification reduces risk, lack of diversification increases asset selection risk but does not necessarily provide for an increased expected return. Thus a poorly diversified portfolio of high risk assets will not necessarily provide an investor with a higher rate of return.

### How Should an Investor Look at Volatility?

Portfolio volatility means different things to different people, as does the word risk. To some it means fluctuations in the value of their investment, to others it means variations in their level of income and to still others it can mean variations in the total return of their portfolio.

Variations in total returns are probably the most meaningful and in this sense it is important for each investor to understand how the long term expected average return from their portfolio will not necessarily reflect any one year's performance of that same portfolio. The chart below provides an illustration of this concept.

Figure 3 - Random Past Annual Returns for Balanced Portfolio Contrasted with the Average Expected Return



See Appendix One - Note C.

As can be clearly seen above, few individual yearly returns are close to the expected 10 year average.

Thus it is critically important to assess or judge the performance of a portfolio over the long term because short term results can be significantly above or below the long term expected average.

The asset allocation of a portfolio should never be changed in response to short term volatility, probably the two worst actions an investor can take are to become more aggressive in a rising equity market or to switch to cash after a fall in the equity markets. Remember every 'bull market' to date has run out of steam at some stage and every 'falling market' in history has improved and risen past previous highs.

Investment volatility is a natural bi-product of our free market capitalist world. Investors need to accept its inevitability and prosper from the rewards it offers.

### The Benefits of Portfolio Re-Balancing

In an ideal world every investor would buy assets when their prices are low and sell those assets when their prices are high. To successfully achieve this in any one transaction, let alone over an extended series of transactions, presumes some ability to predict the future or simply luck.

Notwithstanding the above, over any given period of time, different asset classes do produce higher or lower investment returns than other asset classes. History has proven this beyond doubt.

If an investor has logically developed a preferred portfolio asset allocation and is determined to stick to that asset allocation, he or she can sell high and buy low with modest amounts of their portfolio by using the disciplined technique of re-balancing at pre-determined time periods (e.g: annually or half-yearly), taking advantage of the variance in asset class performance.

The process involves the partial sale of any asset class that is now overweight due to superior performance and buying more of any now poorer performing underweight asset class. In effect 'selling a small amount high' and 'buying a small amount low'. If undertaken in a disciplined manner this process can add substantial value to a portfolio over time and stops the drift towards a more aggressive and hence more volatile portfolio in a rising equity market.

Naturally, taxes and transaction costs must also be considered when re-balancing. Some good evidence exists to suggest re-balancing from cash flows is a sound strategy. (Lennon 2004).

## Minimize Taxes and Costs

Whilst these are no doubt goals for all investors, some key issues are often overlooked:

Firstly, an actively managed portfolio has higher turnover than a passively managed portfolio and with higher turnover comes higher transaction costs, such as brokerage and stamp duty.

Secondly, actively managed portfolios usually have higher fees than a passively managed portfolio. So unless an investor can be assured of selecting an active manager who will outperform the average in the future, (refer to Predicting Future Returns), why pay higher fees?

Thirdly, an actively managed portfolio has higher turnover than a passively managed portfolio and as such usually more realized capital gains, which in turn can mean more capital gains tax paid by the investor and hence a lower after tax return.

Fourthly, patient trading is critical. Index funds and very large share funds often have to buy a certain share or other asset just to maintain their target allocations or benchmarks. This can often lead to 'bidding up the price' of the share or other asset to the advantage of the seller.

Finally, investors owe it to themselves to ensure they understand all costs clearly. Fee only financial advisers that act solely for their clients, usually make the issue of fee disclosure very clear and easy to understand.

## Conclusions

Achieving a successful investment experience requires:

- Understanding investment risk
- Acceptance that markets work efficiently
- No capacity to predict the future
- Diversification to reduce risk
- Acceptance that risk and returns are always related
- Acknowledging that volatility is inevitable
- Development of a sound strategy and remaining disciplined
- Ensuring taxes & costs are understood and kept under control

In the words of Warren Buffet: ***“Successful investing over a lifetime does not require a stratospheric IQ, unusual business insights or inside information. What’s needed is a sound intellectual framework for making decisions and the ability to keep emotions from corroding that framework”.***

## Appendix One – Qualifying Notes

### Note A

In Table 2, the Asset Class Portfolio, the Australian Shares are allocated 50% Large Companies, 30% Value Companies and 20% Small Companies. For International Shares, the allocation is 50% Large, 30% Value and 20% Small with no hedging in place at any time.

The Annual Volatility figures shown are the standard deviations measured as a percentage from the Average (or Mean). Standard deviation is effectively the average variance of the individual yearly results from the Average (or Mean). It is the most commonly used measure of investment risk; the higher the number the greater the uncertainty of the return or the greater the likely variance from the Average (or mean).

### Note B

In Tables 3 and 4, for each portfolio illustrated, the target asset allocations are as shown below:

| <b>Asset Allocation</b>            | <b>Conservative (1)</b> | <b>Moderate (2)</b> | <b>Balanced (3)</b> | <b>Growth (4)</b> |
|------------------------------------|-------------------------|---------------------|---------------------|-------------------|
| <b>Cash &amp; Interest Bearing</b> | <b>70%</b>              | <b>50%</b>          | <b>30%</b>          | <b>15%</b>        |
| <b>Property</b>                    | <b>10%</b>              | <b>10%</b>          | <b>10%</b>          | <b>10%</b>        |
| <b>Australian Shares</b>           | <b>15%</b>              | <b>25%</b>          | <b>35%</b>          | <b>45%</b>        |
| <b>International Shares</b>        | <b>5%</b>               | <b>15%</b>          | <b>25%</b>          | <b>30%</b>        |

### Note C

The Long Term Average Return in Figure 3 has been assessed by the investment committee of FYG Planners Pty Ltd and is based on data from van Eyk Research. Care should be taken when making decisions based on these return forecasts.

Whilst all care has been taken in establishing these prospective returns, investors must be aware that future returns may not resemble past returns.

The Annual Returns shown have been randomly selected from past historical data. Accordingly, if this charting process were run again and again, individual yearly results would vary from those shown.

## Appendix Two - Academic References

The strategies outlined in this paper are based upon the findings of these key academic references and publications, abstracts for which are generally available on the internet. This list is not exhaustive.

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