Three Investment Risks

Just ask yourself, which of the following risks is the most important risk to you. Then, which order would you place them in terms of importance.

A. A significant and prolonged fall in markets that can take years to recover and if your portfolio is not properly structured could affect your financial security for years to come.

B. Under performance of your portfolio against the average stock market investment that could last 1, 2 or 3 years until the investment approach your manager is following recovers.

C. The average monthly up and down movement of your investments, which should have no affect on your financial security providing it is properly structured.

There are three main risks which affect well diversified equity portfolios. These risks are **liability risks**, **performance risks** and **volatility** risks.

1. The risk of a significant and prolonged decline in the value of the stock market and its affects can last as long as 5 to 10 years and often longer. Buying at the top of a stock market cycle can affect retired investors' financial security for the rest of their lives.

    - TAMRIS calls these risks, **liability risks.** They are longer term risks since they can affect the ability of your investments to meet your financial needs over long periods of time.

2. Performance risk is the short term risk of under performing the main domestic stock market index due to the nature of a particular style of investment or allocation to global markets. This is a medium term risk and can last from as short as a few months to as long as a few years..

3. The last major risk is called **volatility**. Volatility is a measure of the average monthly up and down price movement of an investment. Investments which move up and down more erratically than others tend to be higher risk investments. Volatility is a short term risk.

    - TAMRIS considers this to be the least important risk to an individual investor providing a portfolio is properly structured and has a direct relationship with a client's financial needs over time.

Liability risks – longer term risks to financial security

This risk is represented by the financial consequences of a stock market crash or a prolonged bear market.

This is a risk to financial security since it can take between 5 and 10 years for the market to regain its original level following such risks and sometimes much longer and, this is without even taking into consideration the effects of inflation.

Such falls in the market are more often than not preceded by high to excessive market valuations and advanced economic cycles. Market falls are therefore often accompanied by difficult economic conditions such as a recession.

Importantly they are natural risks and they are known risks. A market has historically had a major collapse at least every 10 to 15 years, so a retired individual will need to be able to cope with at least 2 and possibly 3 such events.

This is the risk most investors should be concerned about when they are expressing aversion to risk.

While this risk will affect most portfolios throughout their lifetimes, it is most pronounced for investors who are investing from cash at high market valuations.

Investors who have been invested for a long period of time will not be as badly exposed because the high market valuations are reflected as gains in their portfolio.

Those most at risk will be those investors who are in receiving basic retail wealth management services, those receiving model portfolios with high charges and where the size and timing of financial needs are not related to portfolio structure.

Those least exposed to this risk over the short term will be those investors who either do not need to capital or interest from capital or those who live entirely off dividends and income and who will never need to touch their capital.

Investors need to remember that it is not really companies that become over valued, rather the prices that investors are willing to pay for them become far too high.

It is also important to remember, most normal market movements have little or no impact on the ability of assets to meet financial needs. Most downward movements can be recovered in days, if not weeks or months. Even a couple of years is not a really significant risk event.

Portfolios that are not properly constructed could indeed become exposed to even monthly investment risk or volatility, while properly constructed portfolios could protect financial needs for up to 10 years, depending on the way in which your manager constructs portfolios.

What does your advisor need to do?

The management of liability risks can only be effected in services that actually integrate the management of financial assets and financial needs over time.

Individuals need to ask the following questions

- Is this risk assessed by your advisors?
- Do you know how much security your portfolio provides against such risk?
- Are you able to influence the amount of protection within your portfolios?
- Has the income and capital you have taken from your portfolio had to be significantly reduced because of a market correction, crash, economic recession and/or a prolonged decline in the value of your investment?

Within the financial services industry this risk is not generally assessed.

What does your advisor need to do?

Liability risks within the portfolio need to be constantly managed. The balance of the portfolio between low risk assets and equities need to be constantly managed where income and capital demands on the portfolio materially affect the structure.

This means your portfolio needs to plan ahead and in order to plan ahead, advisors need to be able to value markets and they need to be able to construct portfolios that relate asset allocation to the size and timing of financial needs.

Indeed, most normal market movements have little or no impact on the ability of assets to meet financial needs. Most downward movements can be recovered in days, if not weeks or months.

Why are these dangerous risks?

Most investors will be depleting capital, to some extent over time to meet their financial needs, even high net worth investor. This means they will be having to sell assets to meet financial needs over time.

If you are selling and consuming assets, you want to be able to sell and consume highly valued as opposed to under valued assets. If the portfolio is not properly constructed you will risk having to sell equities when markets are falling or at low levels.

Selling low risk assets can be just as risky if the structure and the planning of the low risk portfolio does not match the size and timing of financial needs. So it is not just stock market investments that can expose you to liability risks.

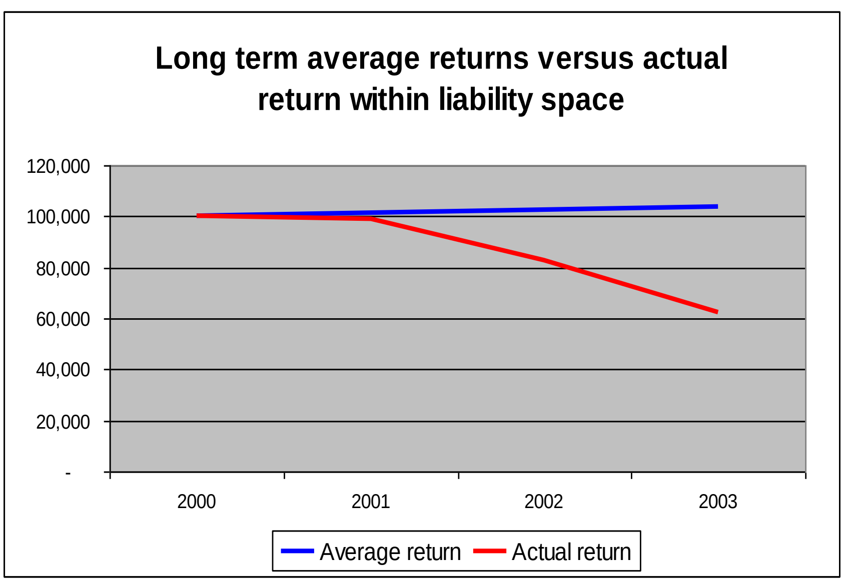
If your portfolio is properly constructed and designed to deal with these risks you will find that your financial security will not be affected by these risks, even though your equity investments will have fallen in value.

This because your portfolio should have sufficient low risk assets to ride out such a storm, because highly valued assets should have been sold in advance and, the portfolio should be able to wait for under valued assets to recover in value.

Portfolios which are well diversified can use the different economic and market cycles in global markets to manage liability risks. Internationally diversified portfolios are better able to manage these risks. Even within in each market, portfolios diversified across sectors and company size are able to enhance the management of risk and return.

Additionally if the returns on which your financial security was based do not reflect these risks and, the portfolio is not structured properly, risks to financial security can be compounded.

Extreme scenario



The above chart shows the dangers of using inappropriate return assumptions for forecasting wealth or the ability of assets to meet financial needs and an inappropriate portfolio structure.

It uses the S&P starting level for each year from 2000 to 2003 and withdrawals of $8,000 a year, taken at the start of the year, the red line.

It compares this against a forecast return of 10% a year at the start of the period (blue line) and $8,000 a year of withdrawals.

While the above is an extreme scenario, it is not an uncommon scenario. Many investors receive such portfolios and such advice. It is important to note that the S&P 500 as of August 2005 has still not recovered its previous high let alone met the return forecasts upon which investor's had based their security.

How do you assess your attitude towards this risk?

Many times investors are asked to define their attitude to risk without knowing how much capital they need in low risk investments to protect themselves against risk or, what type of risk they can cope with.

Are you conservative, aggressive or realistic?

You may even be asked to select from a number of portfolios with different ranges of returns and losses?

Many investors will state that they are conservative, primarily because they do not want all their investments in the stock market and, they do not want to be exposed to the risks this can bring.

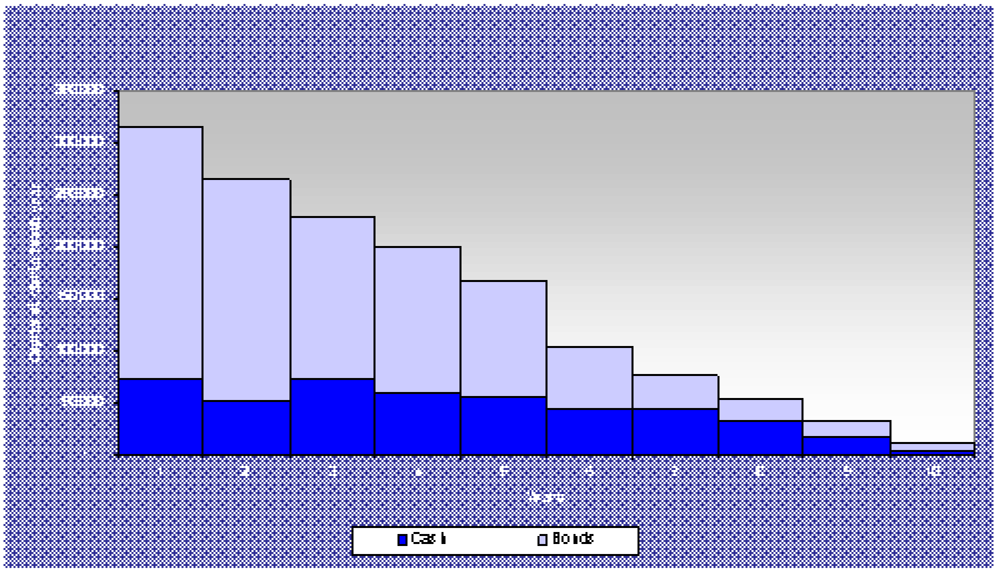
In fact, this is not a conservative attitude, it is a realistic attitude.

TAMRIS recommends that advisors illustrate the level of security a portfolio provides against periods of significant stock market and economic risk.

This type of analysis allows individual investors to determine if the level of security recommended is enough to allay their aversion to significant stock market and economic risk.

For example, an investor who considers themselves conservative and under a normal risk assessment would ask for 50% of their assets to be placed in low risk investments.

However, if we were to do an analysis on how much low risk assets would need to be in the portfolio, as a minimum to protect the investor against significant stock market and economic risk, we might find that 56% needed to be in lower risk assets. The investor who thought he or she was conservative is actually being realistic.



Where this allocation is insufficient to allay worries over stock market risk, the investor could therefore go to progressively more conservative portfolios.

But investors should note that by indicating a higher level of stock market risk aversion they may possibly be a) accepting a higher level of inflationary risk, b) limiting the ability of assets to provide future income and capital growth.

There are many ways of assessing this risk. The way in which it is assessed is dependent on the wealth manager's investment and portfolio construction, planning and management disciplines. Part of the TAMRIS service is to assess whether or not an organisation's management of this risk is appropriate.

Initial investment risk

This is the risk of investing capital at or close to the top of a stock market cycle. As this can be detrimental to your future financial security, it is one of the most serious issues that need to be addressed in long term investment planning.

Although this is not a serious issue for clients who have been invested for some time, it is of considerable importance for clients with sizeable cash balances to invest.

Initial investment risk is not to be confused with investment timing which aims to correctly assess the best time to buy and sell investments for profit.

Most of the time it is possible to invest the majority of the recommended stock market allocation with little risk to future financial security. Stock markets are naturally volatile and to delay investing capital at every juncture will expose investors to different types of risks.

Advisors who look to manage the initial risk of investment will often focus on the areas of value within the recommended portfolio for immediate investment.

Importantly, advisors who focus on managing this risk will have deep knowledge of the mechanics and history of investing. They will also be the type of advisor to invest your funds during periods of excessive perceived investment risk; after markets have fallen significantly following or during economic or market crises, when many investors are avoiding the market.

At times, managing this risk will mean holding back a substantial part of the funds earmarked for investment in the stock market until a more appropriate investment opportunity arises. Because markets can remain overvalued for long periods of time, this may involve holding cash for years as opposed to weeks or months.

If the advisor cannot value the market or the security, they will not be able to manage or assess this risk. To manage initial investment risk you need to be able to value markets and economic cycles and you need a very strong investment discipline.

The opposite risk of initial investment risk is the risk that the market or security continues to rise above the level at which investment was deferred. Investors need to assess whether the risk of missing out on further rises in markets means more to them than the risk to their financial security of investing at high market levels.

The problem is knowing whether or not your advisor knows what they are doing, because you have to rely very much on your advisor's expertise in this area.

Advisors who focus on initial investment risk will tend to be long term, value biased and contrarian investors.

Performance or style risks

Performance risk is the short term risk of under performing the main domestic stock market index due to the nature of a particular style of investment or allocation to global markets.

Different investment styles take different positions from the market to either reduce risk, increase dividend income or to invest in areas that are undervalued or unrecognised growth areas of the market.

Under performance from a style can often be significant and last anywhere between 6 months and 3 years. With an overseas allocation for example, the Canadian stock market might be rising while others are falling.

This is not necessarily a risk to financial security, although it can be if the portfolio is not properly structured.

More importantly, if investors are not educated over the risks as well as benefits of an investment style there will be a conflict of expectations. Assessing this risk is very important. It is a risk which is rarely assessed within the retail financial services industry.

Performance risk assessment is necessary because a manager's investment style and the risks they consider appropriate in order to enhance returns, may not be the risks that the individual can stomach.

Because investment discipline is key to managing risk and return, the individual when assessing their aversion to risk will be faced with a choice of reducing the risk of under performing while increasing other risks.

For example, the manager that looks to global diversification to increase return and reduce risk. If part of this strategy is to invest in markets which are under valued and/or have an earlier economic cycle than the domestic market, then increasing domestic market allocation would increase the portfolio's exposure to higher market valuations and economic risks in the domestic economy.

For example, the manager that allocates to under valued areas of each market they invest in. If the investor does not want to take the risk of under performance that the manager is exposed to, they will need to increase their allocation to more highly valued investments, which may end up increasing risk and reducing return.

A positive aspect of performance risk assessment is that the manager must justify the rationale for their allocation and strategy in terms of risk reduction and valuation.

They must also have a good grasp of the strengths and weaknesses of their investment style as well as an understanding of where they stand in the investment universe. They must also be able to illustrate the risks and returns of their style.

In order for the use of performance risk aversion is to be successful in educating clients and allowing them to adjust allocations in a disciplined framework, the manager must operate within a sophisticated portfolio construction, planning and management system and have specific investment planning disciplines which relate asset allocation and liability management to performance risk aversion while maintaining the integrity of the portfolio.

Assessment of performance risk aversion should never result in a portfolio which does not have a solid and fundamental investment structure.

Why?

Because allowing investors to adjust asset allocation to reduce performance risk increases the number of decisions that a portfolio needs to consider at all three key stages; construction, planning and management.

There are of course numerous benefits

Performance risk structures allow a manager to focus on their core investment discipline without having to research multiple investment styles and allocations and no investor is forced to accept a performance profile they are unhappy with.

Volatility risks

The risk that most investors are asked to assess, is their attitude towards a risk called volatility. Volatility is simply a measure of the up and down movement of an investment.

A more technical definition would state that volatility is a measure of the deviation of the monthly movement of an investment from its average monthly movement.

Investors quite rightly need to be aware of the up and down movements of investments since volatility is a good guide as to how risky an investment or a portfolio of investments will be in terms of price movement.

However, volatility is only an average risk and it is not the actual risk the investor is exposed to at any one point in time. During periods when markets are highly valued, this simple measure of risk significantly understates the risks to which investors are exposed.

It is also not a very good indication of the return that an investor should expect form their investments since the price of an investment at a point in time determines its return more than its historical risk.

Importantly, well structured portfolios will be capable of protecting an investor against the effects of volatility. If you are exposed to the monthly up and down price movements of your portfolio your portfolio may not be the right one for you.

Additionally, volatility is more of a measure of risk associated with different types of investment styles and your advisor should be educating you about the risks and return benefits of their investment style when considering the up and down price movements of investments.

Finally, a portfolio that is constructed to meet financial needs should be taking into consideration risks such as volatility in the investments that are included. You the investor should not be forced to choose, on your own, which risk is most appropriate to you.

Simple explanation

Volatility is a natural characteristic of any investment where its future value is uncertain.

Cash is not volatile because you know in 6 months it will still be worth what it is today. The price of cash does not change.

The future value of a stock market investment on the other hand is uncertain. The future value of value of a company depends on how much it earns after paying all its costs and taxes.

How much it earns depends on many things; is there a lot of demand for what it is selling, is demand for what it is selling likely to grow and, by how much, how much competition does the company have, what will happen to the economy, is demand for its products likely to fall in a recession or not, how well is it run and, many others?

The less certainty you have over the earnings of a company, the more volatile the price will be. If the company earns significantly less than expected, its price may fall more than other companies, if profits rise significantly more than expected, its price may rise more than other companies.

Financial theory states that companies with higher volatility also tend to be companies whose share prices provide a higher level of return over time.

One of the reasons is that companies with higher volatility tend to be growth stocks, where future earnings are both uncertain and potentially significant. This potential for return is considered sufficient reward for those investors who take the risk of the higher volatility.

However, higher risk does not always equal higher return and investments with higher volatility can just as easily be investments with higher losses. For example, technology stocks were higher risk higher return investments in the late 1990s, but were higher risk higher loss investments from 2000 onwards..

One of the most successful schools of investing, value investing, does not use volatilities as a guide to whether an investment will provide an above average return. In fact, any value manager buying stocks will consider the valuation of a company above all else.

Investors should be very wary of any wealth management service that uses only volatility as a guide to risk and return.

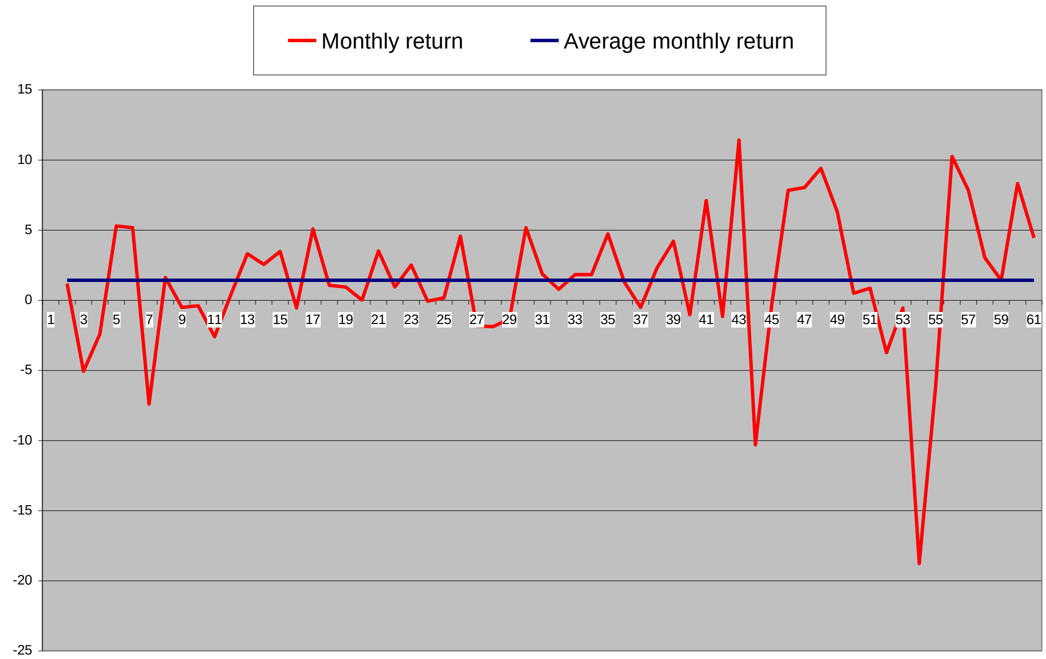
How is volatility calculated

First of all you need to find the average monthly return on an investment. To do this you add up the monthly returns on an investment and then divide by the number of months.

When people measure volatility they try to use a long enough period of time to ensure that the movements in price reflect the actual risk of the investment and not short term stock market conditions. This means most volatility is calculated using data going back over at least the last 5 years and often longer.

Step 1 - Find the average return

The following chart shows the monthly returns on an investment (red line) and the average monthly return (blue line).



Step 2 - Find the difference between the monthly return and the average return

The next step is to find the difference between the actual monthly return and the average monthly return. For example, in month 17 the return is 5% and the average return is 3%, the difference is 2% and if the return in month 7, was -7, the difference would be 12. You would do this for every month. **Step 3 - Find the average of the differences**

This difference is noted by the red line in the following chart. Volatility, is the average of these differences, or the blue line. All we do is add the differences and divide by the number of months.

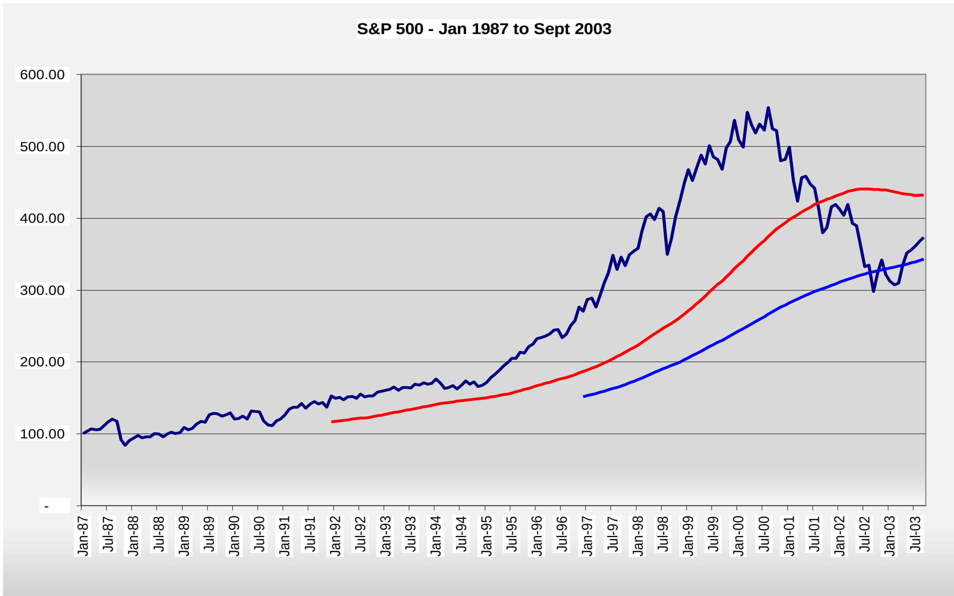
The problem with volatility

The financial services industry focuses primarily on volatility when assessing investors' aversion to risk because most retail portfolio construction uses this risk alone when constructing portfolios.

There are problems of focussing on volatility as single measure of risk.

- Volatility tells you how risky on average an investment has been over time but nothing about how risky an investment is at a moment in time.
- The biggest risks actually occur when investments are over valued. Volatility is not a measure of value or price.
- The risk of up and down movements reduces over time. If you hold your investments for long periods of time, the actual risk of these up and down movements becomes negligible.

The graph below shows the how the risk of investing in the stock market reduces over time. The **black line** is the US stock market as measured by the S&P 500. It shows the monthly movements of the market and explains why most investors are concerned about up and down movements over short periods of time. However, if you are prepared to hold your investments for at least 5 years, the red line is the actually historical risk to the value of your investment. This line is much smoother and is the line investors should focus on.



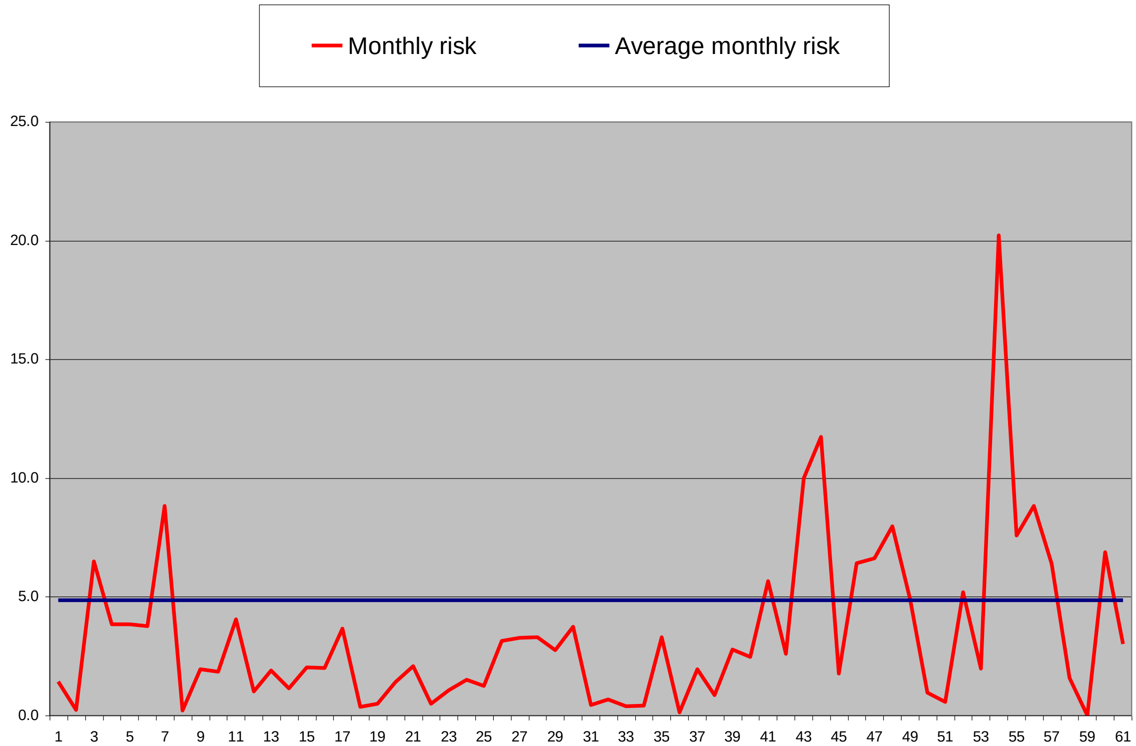
- The biggest risk to an investor is the risk of a prolonged and severe decline in the market. This is not measured by volatility. Volatility is a monthly risk, the risk which investors need to be protected against may last many years.

- Most risk assessment falsely leads investors into assuming that by accepting the risk of larger price movement they will receive a higher return. Higher risk is just as likely to translate into greater loss as opposed to higher return.

- Volatility does not tell you how to structure a portfolio to meet financial needs. A properly constructed portfolio should shield any investor from the risks of volatility.

Volatility is a consequence risk of an investment style and the style's current strategy. It is a natural investment risk and providing allocation and valuation are managed properly, need not affect a client's financial security.

For further information on risk see risk profiling and risk assessment in the Education section and the weaknesses of retail risk assessment and modern portfolio theory in the technical section..



The more volatile an investment is, the more risky it tends to be.

However, as you will note, the **blue line** (volatility) is not as volatile as the **red line** and does not tell you the actual risk your are exposed to at a point in time. For example the investment represented by the above graph was actually 4 times as risky as its volatility at its most risky point.

During periods when markets are highly valued, this simple measure of risk significantly understates the risks to which investors are exposed; the above understates this risk by a factor of 4. Portfolios and financial security need to be built upon a wider and stronger risk management mandate.

How to assess volatility

It should be extremely difficult to use your attitude towards volatility to construct a portfolio. This is because volatility cannot relate portfolio structure to financial needs and it cannot relate to the actual risk and return opportunities in the markets.

In fact, your financial demands on your portfolio should have the greatest bearing on the allocation of the portfolio between low risk assets and equities.

Secondly, it is your aversion to significant risks (or liability risks) and your wish for greater short term financial security against these risks that will determine whether or not you need more low risk investments in your portfolio.

Additionally, because there is direct relationship between your financial needs and the structure of your equity portfolio to meet these needs, the basic risk/return profile of your equity portfolio is more or less determined by your financial needs; the amount in small/medium/large companies, high yielding, growth or defensive stocks, overseas and emerging markets.

Your investment advisors investment planning disciplines are extremely important since it is these disciplines which relate their discipline and approach to the construction of portfolios that meet financial needs.

Their explanation of their investment style and your assessment of your attitude to the risks of their investment style is also key, since this is used to amend the risk and return profile of the portfolio..

As such, assessment of your attitude to volatility is primarily an educational exercise over the risks of investment and how the investment manager manages these risks. This assessment depends on your understanding of the following.

- That volatility is a simple, understandable and natural phenomenon!
- That the point in time risk of volatility reduces over time.
- That volatility is not a measure of how much risk your portfolio is exposed to any one point in time but a guide as to the type of the price movements you will see over time.
- That higher volatility does not always equal higher return; it can just as likely equal higher risk of loss.
- That within a portfolio designed to manage liability risks that volatility should not be a risk to your financial security.
- That volatility is not always a sign of how aggressive a portfolio is. A portfolio invested heavily in overseas markets, with a focus on under valued as well as smaller companies can have a much lower level of volatility than the domestic market, yet its allocation will be aggressively invested.
- What your attitude is to significant stock market and economic risks. Your attitude to these risks is more likely to define the type of investor you are than your attitude to volatility.
- That your assessment of your ability to take the performance risk of the manager’s investment style will have more of a bearing on the risk of the equity portfolio that is selected for you.
- That the discipline and structure of the wealth manager is critical to ensuring that the portfolio you are allocated is in keeping with your attitudes to risk.

The volatility of each individual investment within the recommended portfolio and the volatility of portfolio should be provided to the investor and the risks these signify explained. It is at this point that the investor should be given the opportunity to select a lower risk equity portfolio, if need, or alternatively a higher risk portfolio.

It is also important the information regarding the volatility of the portfolio also be backed up by an asset allocation profile and a valuation analysis, to give a full assessment of current risks and how aggressive or conservative the underlying strategy actually is.

In the end, much depends on the advisor's explanation of the risks and rewards of their investment style and how this affects the risk/return profile of the portfolio over time. Much also depends on the manager's investment discipline and their ability to construct, plan and manage portfolios appropriate to the individual investor's financial needs and risk preferences.

The risk assessment process should be primarily an education process and an opportunity for the investor to make adjustments to the recommended portfolio that more closely mirrors their risk preferences. But this cannot be done without the expertise of the advisor in assessing risk preferences.