# Are you a rational investor?

A client's guide to risk and risk profiling.



**NZ**FUNDS

We would all like to find an investment which provides good returns with no risk. Something that will keep pace with inflation and perhaps grow our wealth – just a little faster than our neighbours – without losing money along the way. When investors have found what they believe to be a medium to high returning asset with little or no risk, the experience has more often than not ended badly. Unfortunately, while these expectations are common, they present a dilemma as returns and risk run in opposite directions. We propose a compromise: a level of risk clients feel comfortable with, in return for the opportunity, but no guarantee, of a rewarding return.

### Just what is risk?

This guide discusses risk and the process NZ Funds has developed to measure the level of risk clients feel comfortable with, which is also known as a "risk profile". A client's risk profile can be used to provide them with an investment portfolio customised in a way that accurately reflects their personal risk, return compromise.

Risk can be perceived in a number of ways. Typically clients view risk as the chance of getting back less money than they originally invested. But risk manifests itself in other, equally important ways. For example, the risk of being unable to sell an investment when it is needed, or the risk of failing to mitigate the effect of inflation over time.

# A framework for managing risk

NZ Funds has developed a framework that helps clients address risk in a systematic way using three concepts: risk compartmentalisation, risk capacity and risk tolerance.

#### 1. RISK COMPARTMENTALISATION

Research suggests that clients have not just one, but multiple attitudes towards risk. For some goals their risk tolerance may be low, while for others risk tolerance may be high.

For example, many people have a household budget for food and a household budget for travel, and they regard each quite differently.

Behavioural finance professor Meir Statman observed that, historically, "many people kept their money for rent, furniture, groceries and so on, in separate jars".

He referred to this behaviour as mental accounting, or risk compartmentalisation. NZ Funds, together with the financial advisers we partner with, wish to enable clients to adopt a similar mental accounting approach when thinking about their investment portfolio. It often helps to think differently about short-term and long-term investments.

To achieve this, NZ Funds has built an investment platform which matches each client's investment portfolio to one of four fundamental goals: Cash, Income, Inflation or Growth. These are known as investment categories. Each investment category has one or more sub-portfolio. Each sub-portfolio's risk profile is designed to reflect the level of risk needed to achieve the goal of the category it sits in.

By allocating a portion of clients' capital to the portfolios within the Cash and/or Income investment category, we seek to ensure clients' cash flow and liquidity needs can be readily met from assets invested with less volatility and risk.

For the bulk of clients' capital, where their goal is to mitigate the impact of inflation on their wealth, investments are chosen with a little more volatility and risk in order to increase the chances of offsetting inflation.

Finally, we take into account the combination of clients' risk capacity and risk tolerance when recommending an appropriate allocation to the Growth investment category as this category is most likely to exhibit high volatility and risk on a regular basis.

Compartmentalisation of risk provides clients with a series of investment portfolios with risk profiles which range from low to high. What the right mix of these portfolios is depends on each client's personal circumstances and in particular the combination of risk capacity and risk tolerance that is unique to them.

#### FIGURE 1: MANAGED PORTFOLIO SERVICE: INVESTMENT CATEGORIES



## ii Income

To provide exposure to income-orientated assets using an active investment management approach.

#### 2 YEARS +

- Core Income Portfolio
- Global Income Portfolio

#### 

To mitigate the impact of inflation on your investment over the medium and/or long-term by investing in incomeorientated assets and growth-orientated assets using an active investment management approach.

#### 5 YEARS +

- Core Inflation Portfolio
- Property Inflation Portfolio
- Equity Inflation Portfolio

#### • Growth

To grow your investment over the long term by investing in income-orientated assets and growth-orientated assets using an active investment management approach.

#### 10 YEARS +

- Core Growth Portfoli
- Global Multi-Asset Growth Portfolio
- Global Equity Growth Portfolio
- Dividend and Growth Portfolio
- Capital Opportunities Portfolio

#### 2. RISK CAPACITY

Risk capacity assesses a client's ability to recover from a period of negative returns. NZ Funds uses age as the prime determinant of risk capacity.

In general, the younger a client, the greater their risk capacity. For example, following a sharp fall in the value of an investment a 40-year old has more time to add to their investment or wait until it recovers before drawing down on it, than a 75-year old.

In practice, a client's age is only used as the starting point for determining a sensible split between the Defensive Portfolio Service (made up of the Portfolios in the Cash, Income and Inflation investment categories) and the Growth Portfolio Service (made up of the portfolios in the Growth investment category).

If a client's investment portfolio is over allocated to the Growth Portfolio Service, it is likely to prove more volatile than they will feel comfortable with given the number of years they have available to recover any drop in value. This increases the risk that they withdraw from the portfolio to "save" the capital they have, which often occurs at the worst possible time. On the other hand, if a client takes too little risk in their portfolio then they may not be able to achieve their personal goals over the long term.

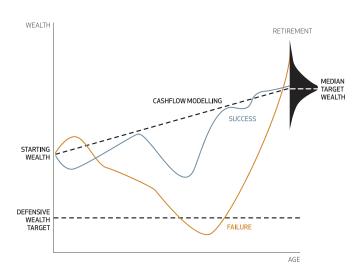
Either way, ensuring clients' investment portfolios have an allocation to growth orientated assets which matches their age-determined risk capacity is an important step toward maximising their investment outcome. But to ensure clients are able to invest for a long enough period of time to realise the benefit of owning growth assets, we need to take their emotions into account as well.

#### 3. RISK TOLERANCE

Risk tolerance is a measure of clients' ability to tolerate investment market volatility. Risk tolerance is important because clients tend to invest with the rational side of the brain and withdraw with the emotional side. Most decisions to invest are grounded in reason based on what the investment may be worth in ten or twenty year's time. However, once an investment is made, clients tend to "keep score" along the way. If progress is not linear, they become either disappointed or outright fearful, both of which are emotions that lead them to break with the original plan and redeem. As a result the journey that a client's portfolio takes is as important as their initial return objective.

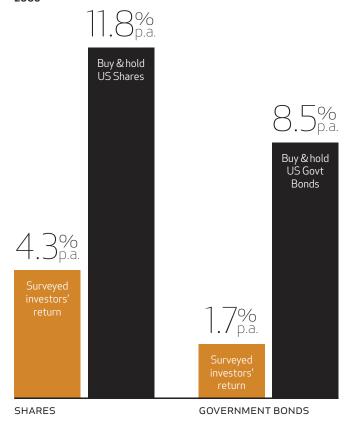
Figure 2 suggests that although the investment choice shown on one line (orange)generates a higher return, the journey did not match the client's tolerance for risk and so the potential return was never realised. The second investment portfolio, which followed a smoother path (blue), proved to be more aligned with the client's risk tolerance, and consequently led to a better final result, even though it did not "optimise" the client's potential level of return.

#### FIGURE 2: WHY THE JOURNEY MATTERS



While straightforward enough on paper, dealing with even a modest downturn can prove challenging for clients, especially when changes in their personal circumstances are overlaid on top. This is where a financial adviser can make all the difference.

FIGURE 3: WHY MANAGE RISK: 20-YEAR RETURNS FROM 1987 TO 2006



SOURCE: 2007 DALBAR QAIB REPORT

# How your financial adviser can help

Left to make investment decisions alone, clients often make choices that negatively impact their investment returns, or reduce the likelihood that they will achieve their long-term investment objective. For example, in an effort to avoid losing money, clients frequently invest after a period of strong returns. While the strong historic returns may make clients feel better about the decision to invest, ultimately their investment experience will be determined by what happens next. Such behaviour may ironically increase the risk that clients will lose money. By waiting for a rise in investment markets, clients end up purchasing assets which are more expensive, and therefore more vulnerable to a fall in value.

This tendency to buy high and sell low is one of the reasons why, globally, individual investors on average only receive a very modest proportion of the overall return of the asset class they invest in, as the figure 3 graph attests.

However, there is another way to build the confidence necessary to invest, irrespective of the current mood of investment markets. That is through working with a financial adviser. By working with a financial adviser, clients are more likely to build an appropriately diversified investment portfolio early on. This in itself should help reduce the pressure clients feel during periods of investment market volatility. Perhaps just as importantly, an experienced financial adviser can help make difficult investment decisions along the way, in a more reasoned (and less emotional) manner. For example, if a change in investment markets - or personal circumstances – means a client has to access their investments, there are a number of different ways this can be done and a number of different timeframes over which to do it. While each client's circumstances will be unique to them, talking with someone who might have met with an average of three or four clients a day for the last ten or twenty years can be helpful in identifying what options are available. The best option will often depend on how clients' responded in their risk profiling questionnaire.

# A new risk profiling questionnaire

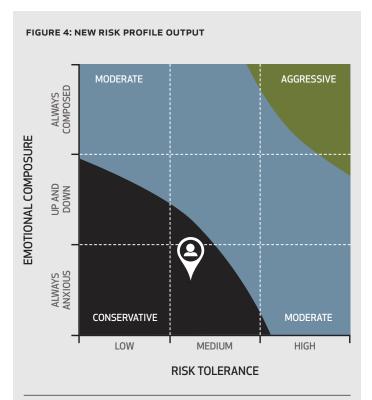
Over the course of the last year, NZ Funds has enhanced its risk profiling process by including a number of insights gained from the study of behavioural finance. In particular, we wanted to add questions to determine clients' emotional composure. This could then be combined with clients' cognitive or "thinking" assessment of their risk profile. The combination of both assessments has the potential to lead to a more realistic assessment of how clients might react during periods of weak investment market returns.

NZ Funds' new risk profiling questionnaire stretches to 21 questions. Although it may take a further five minutes to complete, the research indicates that increasing the number of questions can improve the questionnaire's reliability.

Before investing most clients would have completed a risk profiling questionnaire, the outcome of which will classify them as having a conservative, moderate or aggressive risk profile. Those clients have the opportunity to see whether the enhanced questionnaire estimates their risk and return expectations more accurately.

The new risk profile questionnaire is made up of a mix of thinking (cognitive) and feeling (emotional) questions. The cognitive questions have been chosen from categories that are most likely to be relevant (or correlate with) clients' risk profiles. The final questions ask clients about actual investment choices they have made in the past, including tradeoffs, positive and negative experiences, levels of personal investment knowledge and self assessments. Questions which ask whether clients feel comfortable taking different types of risk in other areas of their life – such as travelling to a Third World country – have been removed. However it is the inclusion of an assessment of a client's emotional composure that we believe will greatly improve the accuracy of the process.

From the answers to these questions, a two dimensional risk profile can be assembled. This shows how much risk clients think they should take to meet their goals against how much risk they are capable of taking before changes in their investment portfolio value begins to impact on their emotional wellbeing.



This client outcome shows a client who wishes to assume a medium level of risk in order to meet their goals. However, their relatively anxious emotional composure would result in them being better suited to an investment portfolio constructed with a conservative risk profile in mind.

#### Initial client feedback

Prior to launching the enhanced risk profiling process, a number of existing clients completed the questionnaire. This enabled us to establish that the questions were understandable, took no more than five minutes to complete and were capable of resulting in a wide dispersion of risk profiles from conservative to aggressive.

Over time, as clients' knowledge of investing and risk increases and their experiences in life and investing evolve, it is likely that their risk tolerance and emotional composure will change. To address this, financial advisers should re-assess clients' risk profiles every 12 to 18 months.

The risk profiling questionnaire is now available for clients to use online. As clients complete the new questionnaire, we will be able to show them how they compare with other clients who have already completed the questionnaire.

### Summary

Our aim is to continually improve the risk assessment tools that clients and their financial advisers have available. The more accurate the risk profiling process is, and the richer the risk conversations between clients and their advisers, the more likely clients are to have an investment portfolio which accurately reflects their desired trade off between risk and return.

If you would like to update your risk profile, or discuss your investment portfolio in further detail, please contact your financial adviser or NZ Funds' client service team.

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INVESTMENT STATEMENT: A copy of the NZ Funds Managed Portfolio Service Investment Statement and the NZ Funds KiwiSaver Scheme Investment Statement is available free of charge from either your financial adviser or NZ Funds.

### **NZ**FUNDS

#### NEW ZEALAND FUNDS MANAGEMENT LIMITED

#### AUCKLAND

LEVEL 16, ZURICH HOUSE 21 QUEEN STREET PRIVATE BAG 92163, AUCKLAND 1142 NEW ZEALAND

PHONE - 09 377 2277 EMAIL - INFO@NZFUNDS.CO.NZ WWW.NZFUNDS.CO.NZ

WELLINGTON	CHRISTCHURCH	WANAKA	DUNEDIN	INVERCARGILL
LEVEL 10	UNIT 7A	UNIT 7	LEVEL 2	98C YARROW STREET
49 BOULCOTT STREET	9 SIR GIL SIMPSON DR	12 FREDERICK STREET	BRACKEN COURT	INVERCARGILL 9810
WELLINGTON 6011	BURNSIDE	WANAKA 9305	480 MORAY PLACE	
	CHRISTCHURCH 8053		DUNEDIN 9016	
PHONE 04 473 7701	PHONE 03 366 9088	PHONE 03 443 2300	PHONE 03 477 4647	PHONE 03 218 2895