

## The myths of risk tolerance

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Discussions of risk often involve an imprecise vocabulary. Literature is replete with terms such as “risk tolerance,” “risk acceptance,” “risk appetite,” “risk attitude,” “risk profile” and “risk propensity.” All of these deal with the same basic notion, namely, whether one is willing or unwilling to undertake a nonguaranteed course of action. For simplicity and consistency we will use the term “risk tolerance” and debunk some of the myths related to this term.

### **Myth 1**

People all have a high risk tolerance when the market is going up - but when the market starts to crash, their risk tolerance suddenly goes down to zero.

### **Reality 1**

Risk tolerance remains mainly unchanged, whereas risk perception could change during changing market conditions.

David R Hunter, author of *Risk Perception and Risk Tolerance in Aircraft Pilots*, noted in his research: “Risk perception and risk tolerance are related and often confounded constructs,”<sup>1</sup> but each one can independently contribute to risk-taking behaviour.

Hunter distinguishes between these two constructs as follows: “Risk perception may be conceived as primarily a cognitive activity, involving the accurate appraisal of external and internal states. By contrast, risk tolerance is better conceptualised as a personality trait. Risk tolerance may be defined as the amount of risk that an individual is willing to accept in the pursuit of some goal.”<sup>2</sup>

Risk perception is elicited by asking the following type of question: “Please indicate how risky you view investment X” (with the possible answers being: not at all risky/somewhat risky/moderately risky/extremely risky). Risk tolerance, however, would be tapped by a question such as: “Please indicate your likelihood of making investment X, given that level of risk” (with possible answers: very unlikely/somewhat unlikely/somewhat likely/very likely).

This could be further illustrated by the following example. Assume 1999 Dakar winner Giniel de Villiers, with his high risk tolerance for speed, drives at 300 km/h down a straight and approaches a hairpin bend. Reducing his speed to 80 km/h he goes into the bend and then speeds up to 200km/h before entering the next bend, where he reduces his speed to 50 km/h.

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Does this mean Giniel's risk tolerance for speed increases on the straights and reduces on the bends? No, his risk tolerance remains constant, however, his perception of the amount of risk involved going into the bend changes and he therefore reduces speed.

## **Myth 2**

Asset allocation depends on the investor's risk tolerance only and this will ultimately determine whether the investor succeeds or fails in meeting his/her investment objectives.

## **Reality 2**

Financial services companies and financial advisors have mistaken asset allocation calculator questionnaires for risk tolerance tests. The ambiguity of these tests has led to confusion regarding clients' risk tolerance. This is because questions relating to risk capacity, time horizon and financial situation form part of a questionnaire that suggests that "we propose asset allocations based on your stated investment objectives and experience, time horizon, risk tolerance and financial situation."

Risk has three primary aspects:

**Risk required.** The risk associated with the return that would be required to achieve the client's goals (a financial characteristic).

**Risk capacity.** The extent to which the future can be less favourable than predicted without derailing the client's plans (a financial characteristic).

**Risk tolerance.** The level of risk the client prefers to take (a personality characteristic).

Asset allocation depends on all three of these risks, which could each require a different asset allocation. The investor, with the guidance of the financial planner, needs to determine the gaps and find the right balance between these risks to determine the correct asset allocation.

## **Myth 3**

Participating in activities such as bungee jumping, abseiling and parachute jumping implies the investor has a higher investment risk tolerance.

## **Reality 3**

There are four types of risk tolerance – physical, social, ethical and financial. Individuals behave consistently within a risk tolerance type, but not across risk tolerance types. So, for instance, a mountain climber is more likely to be a hang glider than the general man or woman in the street,

but may or may not be a financial risk taker. Someone doing parachute jumping every Saturday clearly has a high physical risk tolerance but may have a very low investment risk tolerance.

There are no sub types of financial risk tolerance, such as investment risk tolerance, insurance risk tolerance and borrowing risk tolerance. Research reveals that a single trait applies across all financial dimensions.

#### **Myth 4**

Financial advisors can accurately estimate their clients' risk tolerance without the client having to complete a proper risk tolerance questionnaire.

#### **Reality 4**

Although financial advisors use some form of risk tolerance questionnaire, most believe they can accurately estimate a client's risk tolerance by interviewing the client.

Industry research shows that:

- Advisors' estimates of clients' risk tolerance are less accurate than clients' self-estimates of their own risk tolerance;
- Clients' self-estimates of their own risk tolerance are more accurate than advisors' self-estimates of their own' risk tolerance; and
- Advisors' estimates:
  - exhibit gender bias
  - over/underweight other demographics

Advisors in general assign too much diagnostic value to demographic variables such as gender, income, wealth and marital status. Strong evidence exists of gender stereotyping in advisors' estimates – they overestimate the risk tolerance of male clients and underestimate the risk tolerance of female clients, although this is less the case with female advisors.

Making mistakes regarding clients' risk tolerance will not necessarily result in dangerous advice. Still, some clients may be overexposed to risk, which can have dire consequences during market downturns. Increased anxiety can cause a panicked sale at or near a market bottom with dire consequences for a client's financial and emotional well-being.

## Myth 5

Questions on the time horizon of the investment, investor's age and when the investor will retire are relevant to determine an investor's risk tolerance.

## Reality 5

Usually comprising five to 20 questions, industry-standard questionnaires are neither valid nor reliable. They are arbitrarily constructed without any scientific discipline, containing too many bad questions that are irrelevant or too technical and not enough good questions that are essential for acceptable reliability.

Years ago, it was not uncommon to find questions relating to physical risk tolerance in questionnaires designed to measure financial risk tolerance. Today, too many risk tolerance questionnaires deal with financial matters that have little to do with risk tolerance.

This stems from ubiquitous asset allocation calculators designed to produce an asset allocation (or model portfolio) recommendation based on brief questionnaires about risk tolerance, time horizon, withdrawal expectations, investment experience, risk capacity and other areas.

Although time horizon and other matters are relevant to investment advice, they are not relevant to risk tolerance, so the first problem with standard questionnaires is that they include irrelevant questions. With low financial literacy as a major obstacle, the second problem is that they use too many technical terms.

Advisors have a professional, legal and ethical obligation to form a view as to their client's risk tolerance and to take that view into account when giving advice. In discharging this obligation, the starting point is an objective assessment of the client's risk tolerance made by way of a scientific risk profile. A risk profile, of itself, is not the determining factor in any aspect of a financial plan. However, if a recommendation involves a level of risk beyond that which the client would normally be willing to accept, the client should be aware of the mismatch and either consent to it or be given other alternatives. Without this awareness, no client can be said to have been given properly informed commitment to implementation of the financial plan.

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(1) Hunter, D.R., *Risk Perception and Risk Tolerance in Aircraft Pilots*, Report No.: DOT/FAA/AM-02/17 (Washington, DC: Office of Aerospace Medicine, Federal Aviation Administration, September 2002): 2.

(2) Hunter, *Risk Perception and Risk Tolerance in Aircraft Pilots*, p. 3.

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