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# Commonly Asked Questions About The Risk Advisor

from Investment Technologies

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# Introduction

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The Risk Advisor combines behavioral finance, psychometrics, and computer technology to deliver the most effective and accurate risk assessment and portfolio selection system available. Designed for use by investment professionals, The Risk Advisor determines an individual investor's risk tolerance and identifies an appropriate investment portfolio from an efficient frontier, family of mutual funds, or 401k investment options.

The Risk Advisor from Investment Technologies is the only commercially available risk-assessment tool built upon behavioral finance. Here are just a few of the features that make The Risk Advisor a superior alternative to standard risk tolerance questionnaires:

- The Risk Advisor's questionnaire incorporates *adaptive questioning*, how an investor answers one question determines the next question presented. With standard questionnaires, all investors see the same questions regardless of their responses.
- Dollar values used in the Risk Advisor's questionnaire are *scaled* to each investor's *wealth* so that questions are relevant to the individual. Standard questionnaires use canned questions with fixed dollar values.
- The Risk Advisor ranks portfolios in relation to actual standard deviation values (*absolute mapping*). Absolute mapping assures consistency of portfolio choices across different universes of investments. Standard questionnaires use only relative mapping where portfolios are ranked in relation to each other (*relative mapping*).
- The Risk Advisor provides greater accuracy in treating risk tolerance and time horizon separately in the portfolio selection process. Standard questionnaires combine these two factors into a single score.

For a look at how The Risk Advisor works, visit [www.InvestmentTechnologies.com](http://www.InvestmentTechnologies.com). For more information, please call us at 212/724-7535 or send an email to [info@InvestmentTechnologies.com](mailto:info@InvestmentTechnologies.com).

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## What is a risk assessment?

A risk assessment consists of a numerical risk score (from 1 to 100 with 1 being most conservative and 100, most aggressive). Using this score, The Risk Advisor identifies a suitable portfolio from a predetermined set of portfolios.

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## Why do individuals need a risk assessment?

Risk attitudes are a psychological attribute of the individual. And designing an investment program without an accurate measure of the investor's personal ability to accept this risk is like driving an automobile without a speedometer—you can't tell if you're going too fast or too slow. This means that even those financial plans that do a good job of helping individuals set their objectives and identify reasonable strategies may be inappropriate if they require the investor to accept more risk than they are psychologically able. The inevitable result will be an inability to stay the course when things get tough.

An accurate, personalized risk assessment can reduce this danger by helping individuals identify investment plans that are consistent with their risk tolerance.

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## How do you create a personalized risk assessment?

The Risk Advisor brings rigorous financial and behavioral techniques to bear on what had previously been an informal, unscientific process.

The Risk Advisor begins with a short, multiple-choice questionnaire that gathers information on your current portfolio and how you might react to a variety of investment situations. These questions and their scoring are the result of two years of extensive research and validation by Investment Technologies and Dr. Jim Corter, Professor of Psychometrics at Teachers Training College, Columbia University, New York.

To insure the most accurate possible result, The Risk Advisor uses several specialized techniques such as wealth scaling and adaptive questioning.

Each answer is assigned a specific number of points, which are totaled for a personal risk tolerance score. The Risk Advisor then uses Investment Technologies' Absolute Mapping technology to identify the exact level of volatility that is consistent with the investor's risk tolerance score and investment horizon.

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## How does The Risk Advisor differ from other risk tolerance questionnaires?

The Risk Advisor, the result of two years' development and testing, is a sophisticated analytical tool that incorporates the latest in investment and behavioral-finance theory. It is not just another "add-on" to a financial website. The Risk Advisor's unique capabilities include:

- Wealth Scaling
- Adaptive Questioning
- Absolute Mapping
- Psychometrics
- Behavioral Finance

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## **I'm a stockbroker or financial advisor. Can I use your service for my clients?**

Yes. The Risk Advisor was designed with professional financial advisors in mind. It is sold only to registered financial advisors and not directly to retail investors.

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## **What is the cost of the service?**

The Risk Advisor is available on a subscription basis where subscribers pay an annual license fee. Optional services include private-labeling the service and general customization. The Risk Advisor can be hosted on our server or your corporate Intranet.

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## **Where do the investment recommendations come from?**

You provide an array of portfolios with annual standard deviations. These portfolios may be developed using The Expert Allocator, portfolio optimization software from Investment Technologies, or you may generate portfolios on your own. The Risk Advisor identifies one of these portfolios based on the investor's risk tolerance score.

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## **Why do you need to know the size of my investment portfolio?**

Portfolio sizes are required for questions using wealth scaling. With wealth scaling, dollar values are scaled so that questions are relevant to the individual.

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## **Has your methodology been validated?**

The Risk Advisor was developed according to the most rigorous financial and psychometric techniques. Dr. James Corter, Professor of Psychometrics at Teachers Training College, Columbia University, and Investment Technologies have conducted testing and research studies to validate the methodologies. Qualified prospects may request a copy of the validation report.

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## How many questions are there?

There are approximately 11 questions in the free online version and approximately 15 questions in the commercial version. The number of questions you will actually answer will vary due to adaptive questioning.

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## How long does it take to complete a risk assessment?

A complete risk assessment can be done very quickly—usually no more than 7 minutes.

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## How is the investment horizon used?

The time horizon is the link between risk score and investment strategy. Longer time horizons allow more aggressive investment strategies for a given risk score. Investment Technologies has developed special techniques to create the relationships between each risk score and investment horizons from 1 to 20 years.

Separating the risk score and the investment horizon is one of The Risk Advisor's most innovative and powerful features. It recognizes the singular importance of time on the investment decision while at the same time providing additional insights on the reasons behind each investment recommendation.

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## What is the risk score?

The risk score is a numerical value between 0 and 100 that identifies an individual's intrinsic, psychological attitudes to investment risk. Low risk scores indicate a preference for more conservative investment strategies, and vice versa for high risk scores.

Important note: Since the risk score is a measure of the individual's innate attitude to investment risk, the investment horizon does not affect the risk score.

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## What is wealth scaling?

Wealth scaling is a technique that incorporates the value of your portfolio in certain questions. This eliminates the distortions caused by using fixed dollar amounts for all individuals, regardless of the size of their portfolio.

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## What is adaptive questioning?

Taken from the field of psychometrics, this technique selects follow-up questions based on the answer to the previous question. This permits fine-tuning of individual responses and is a major reason for the increased accuracy of The Risk Advisor.

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## What is Absolute Mapping?

Absolute Mapping is a proprietary technology developed specifically for The Risk Advisor that enables risk scores to be "mapped" onto precise volatility values once the individual's investment time horizon is known. This allows the service to make specific investment recommendations such as mutual funds or efficient portfolios.

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## What is psychometrics?

Psychometrics is the science of quantifying the psychological attributes of an individual. In designing the questions for The Risk Advisor we have incorporated several standard psychometric techniques.

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## What is behavioral finance?

Standard finance as well as behavioral finance attempt to explain the actions of individuals when they are faced with financial decisions under conditions of uncertainty. Behavioral finance is concerned with how people actually behave, while standard finance focuses on how they should behave under ideal conditions. Over the past several years behavioral finance has become increasingly recognized as a viable alternative to standard finance in explaining investor behavior.

An important example of the differences between the two approaches: Behavioral finance recognizes that individuals are more distressed with potential losses than they are pleased with potential gains of equal size. (In behavioral finance, this phenomenon is known as myopic loss aversion.) Standard finance on the other hand assumes individuals have equal amounts of dissatisfaction and satisfaction with these two outcomes.

In order to capture the true, rather than theoretical attitudes of individuals, The Risk Advisor incorporates behavioral finance techniques.

*See New York Times article on Behavioral Finance (Business Section, 2/11/2001)*