

12-1-2018

The Investment Risk Tolerance Assessment: A Resource for Extension Educators

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Recommended Citation

Rabbani, A., O'Neill, B., Lawrence, F., & Grable, J. (2018). The Investment Risk Tolerance Assessment: A Resource for Extension Educators. *Journal of Extension*, 56(7). Retrieved from <https://tigerprints.clemson.edu/joe/vol56/iss7/3>

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Abstract

This article provides a brief review of investment risk tolerance, clarifications of terms used to describe risk attitudes, and a description of an online tool, the Investment Risk Tolerance Assessment (IRTA). The IRTA is a research-based tool that provides a score indicating a personalized analysis of a user's willingness to take financial risk. Extension educators can add value to the lives of their clientele by providing assistance in assessing risk tolerance in a valid and reliable manner. For this reason, the IRTA should be a useful addition to Extension educators' toolboxes.

Keywords: [financial](#), [investment](#), [risk](#), [risk tolerance](#)

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Financial literacy is a personal attribute that promotes economic stability at the individual and household levels (Giuffrida, 2000). Many county- and state-level Extension services are actively involved in providing financial literacy programs on a wide range of topics, including but not limited to money management, credit and debt management, tax planning, saving, and investing.

A common theme of financial literacy programs is aligning financial decisions with the values, attitudes, and expectations of the financial decision maker. It is hard to imagine a comprehensive financial literacy program that does not include a detailed discussion of financial risk tolerance—a characteristic relating to a person's willingness to engage in a financial behavior where the outcome is uncertain and potentially negative. Risk tolerance is known to be associated with individual characteristics such as age, gender, investment experience, income, assets, and financial self-efficacy (Grable, 2000; Hallahan, Faff, & McKenzie, 2004; Montford & Goldsmith, 2016).

Issues related to the assessment of financial risk tolerance are sometimes minimized in financial literacy education programs. It is typical for financial literacy materials to include cursorily formed questions such as "What would you do if the stock market fell by 20%?" or "Would you prefer a bank account earning 3% or an investment earning 9%?" Although valuable, these types of questions often fail to lead to a robust indication of an educational program attendee's true tolerance for financial risk.

An accessible, easy, fun-to-use research-based alternative exists: the Investment Risk Tolerance Assessment (IRTA), an online risk assessment tool available through the University of Missouri's Department of Personal Financial Planning. This tool was designed for the purpose of assisting Extension professionals who wish to help individuals and groups measure risk tolerance. Although it has been available for over a decade, the assessment tool is not widely known outside of academic environments and thus far has been used by only a limited number of Extension professionals. This article was written for the purpose of providing information about the tool to a wider Extension audience.

Importance of Financial Risk Tolerance

Investment risk tolerance affects financial decisions made by Extension clientele, including farmers deciding between securities and farm machinery purchases (O'Neill, Komar, Brumfield, & Mickel, 2010; O'Neill, Porter, Pankow, Schuchardt, & Johnson, 2010), consumers selecting personal investments (O'Neill, 2003), and 4-H club youths learning about compound interest and investing (Garcia et al., 2017). Investment risk tolerance can have an enormous impact on future life outcomes. For example, differences between average returns on stock mutual funds versus conservative cash equivalent assets can result in a difference of tens, even hundreds, of thousands of dollars of accumulated savings. Helping an Extension client understand his or her risk tolerance before investment decisions are made can help ensure that a potential course of action matches the person's financial comfort level.

Risk Tolerance Terms and Definitions

It is quite common to hear terms such as *risk tolerance*, *risk preference*, *risk capacity*, and *risk composure* used interchangeably. Using the correct term when working with Extension clientele is one way to help people select choices that match their comfort levels when taking a risk.

As already suggested, *risk tolerance* refers to the maximum amount of uncertainty a decision maker is willing to accept when making a financial decision. The opposite of risk tolerance is risk aversion. *Risk preference* refers to a decision maker's general feeling that one situation or choice is better than another one, regardless of whether this feeling is accurate (Nobre & Grable, 2015). Compare this to the definition of *risk perception*, which is a subjective cognitive appraisal of the riskiness of choice alternatives (Nobre & Grable, 2015). When viewed this way, perceptions and preferences can be understood to help inform risk tolerance.

Three other risk concepts are worth considering. The first is risk capacity, which is a decision maker's financial ability to withstand a potential loss resulting from a risky behavior. The second is risk composure, or a decision maker's propensity to behave in a consistent manner (Nobre & Grable, 2015). The third concept is risk need, which is the required return needed to meet a financial goal.

Structure and Use of the IRTA

The IRTA provides a score indicating a personalized analysis of a user's risk tolerance level. It is grounded in research conducted by Grable and Lytton (1999, 2003). Numerous studies have involved use of the IRTA as both a descriptor of behavior and an outcome measure (e.g., Gilliam, Chatterjee, & Grable, 2010; Grable & Heo, 2016, 2017; Grable, Heo, & Kruger, 2016; Grable, Lytton, & O'Neill, 2004; Grable & Rabbani, 2017; Rabbani, Grable, Heo, Nobre, & Kuzniak, 2017). Overall, the statistical validity and reliability of the IRTA has been well documented (e.g., Grable & Lytton, 2001; Grable & Schumm, 2010; Kuzniak, Rabbani, Heo, Ruiz-Menjivar, & Grable, 2015; Yang, 2004). It is believed to have produced the largest personal finance database ever collected.

The IRTA contains 13 questions including those that measure three distinct domains of financial risk tolerance: (a) willingness to make investments, (b) comfort with and experience in taking risks, and (c) willingness to take a speculative risk. The IRTA questions measure a decision maker's willingness to take risks when faced with possible gains, probable losses, small and large outcomes, guaranteed and uncertain returns, and long-shot chances.

Scores on the IRTA can range from 13 to 47. Higher scores are descriptive of increased risk tolerance. Traditionally, scores have been interpreted as follows:

- scores from 13 to 18 indicate a low tolerance for risk;
- scores from 19 to 22 indicate a below-average tolerance for risk;
- scores from 23 to 28 indicate an average/moderate tolerance for risk;
- scores from 29 to 32 indicate an above-average tolerance for risk; and
- scores from 33 to 47 indicate a high tolerance for risk.

The IRTA was previously housed at Rutgers University; however, it is now available online through the University of Missouri Department of Personal Financial Planning at http://pfp.missouri.edu/research_IRTA.html. The tool is available at no cost. Extension professionals can assist clients in accessing and using the tool. Users receive a personalized investment risk self-assessment, and collected data are aggregated for use in ongoing studies of investment risk tolerance.

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