Educating Consumers about Investment Risk

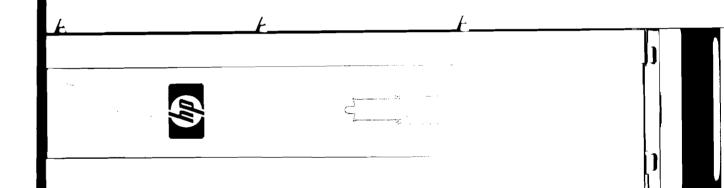*Jean M. Lown, Utah State University*

Determining Risk Tolerance

"Your risk tolerance is your ability or willingness to endure declines in the value of your investments while you wait for them to return a profit that will help you meet your investment goal" (Your risk tolerance, 2001). What is the connection between risk tolerance and investment choices? The following question comes from the Federal Reserve Board's Survey of Consumer Finances (SCF) and is the most widely used risk assessment measure for research (Sung & Hanna, 1996):

"Which of the following statements comes closest to the amount of financial risk that you are willing to take when you save or make investments?

1) Substantial financial risks expecting to earn substantial returns.
2) Above-average financial risks expecting to earn above-average returns.
3) Average financial risks expecting to earn average returns.
4) No financial risks."

Fully 45.6% of respondents to the 1995 SCF chose "no financial risks" (Sung & Hanna, 1996). Does this mean such investors should be advised to put all their unspent income into federally insured savings accounts, certificates of deposit, and Treasury securities? Would such investors be able to reach their long-term goals and retire in security with these "risk free" investments?

There is no such thing as a risk-free investment. While savings accounts and government securities may guarantee principal, they don't insure your money will keep up with inflation and reach the large sums needed for retirement. Nevertheless, many investment

publications and web sites use risk questionnaires to recommend "suitable" investments. Mixing risk preferences for savings for short term and long term investment, as in the SCF question, is inappropriate. An investor could appropriately select response #4 and a federally insured account for a goal for which the money is needed in a year or two. The same investor could select response #1 and a 100% equity portfolio for retirement 20 years in the future. Many adults do not understand the various components of investment risk, especially the risk that they will not be able to achieve their goals with conservative investments.

The purpose of this article is to encourage educators to examine how they conceptualize and teach about investment risk. Educators can help investors adopt a more realistic approach to risk tolerance and investment selection based on a time horizon for financial goals.

Review of Literature

Little research has been conducted to establish the reliability and validity of risk tolerance instruments. Personal finance magazines, newspapers, and web sites routinely publish risk questionnaires that purport to neatly categorize respondents and match them with suitable investments. Yet few valid and reliable risk assessment instruments are available (Grable & Lytton, 1999); only recently have behavioral economists begun to develop research-based risk assessments (Opdyke, 2000).

Grable and Lytton (1999) developed a 13-item risk-tolerance assessment and compared it to the single financial risk item from the Survey of Consumer Finances. They concluded that one SCF item is not sufficient to measure investment risk tolerance because it does not represent the full range of risk tolerance, and that the methods for assessing risk tolerance need refinement.

In a study of wealthy investors, Kennickell, Starr-McCluer, and Sunden (1997) found inconsistencies between subjects' self-
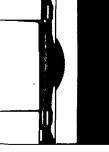
identification of risk tolerance and the risk level of their investments. Although the sample was small, the study highlights the discrepancy between risk tolerance as measured by the SCF and the selection of suitable investments.

While in the past researchers determined that women were more risk averse than men and thus invested more conservatively (e.g., Bajtelsmit & Bernasek, 1996; Sung & Hanna, 1996), more recent research has challenged this assumption. Holding marital and employment status constant, Sung and Hanna (1998) concluded there is no significant gender difference in investment decisions. Women self-identified as risk averse and held fewer risky assets; however, gender differences appeared to result from differences in net worth and inheritance expectations (Embrey & Fox, 1997).

Using the 1992 Survey of Consumer Finances, Grable and Lytton (1998) concluded that educational level was the most powerful determinant of risk tolerance. The more educated the respondent, the higher the expressed risk tolerance. Variation in risk tolerance may be due to differences in understanding the nature of investment risk (Sung & Hanna, 1996). "For clients with longer term goals, such as those investing for retirement that is more than 10 years away, simply taking a client's risk aversion at face value is questionable" (Sung & Hanna, 1996, p. 17). Using a series of theoretical portfolios, Hanna and Chen (1997) demonstrated that with a minimum five-year time horizon, even investors who express high risk aversion should have some stocks in their portfolio.

Problems with Risk Tolerance Instruments

Grable and Lytton (1999) question reliance on the single item SCF risk measure. Recent work in behavioral economics suggests a very different approach to assessing investment risk tolerance (Opdyke, 2000). The problem with risk tests is that they take as a

"given" an uneducated consumer's answers to simplistic questions. Most risk assessment instruments are fraught with problems, for they

- place investors into a rigid category and restrict their investment recommendations,
- do nothing to educate consumers about the risk-return relationship, and
- fail to make the connection between risk tolerance and time horizon.

There should be a connection between the time horizon (when the money is needed) and the choice of investment vehicles. One of the riskiest options is to select "safe" investments for long term goals with the end result that the investor slept well but failed to attain the goal. Granted, risk is a four-letter word, but one with a very positive connotation to mirror its darker image. Most consumers react negatively to the word "risk," yet the unprecedented stock market returns of the 1990s would not be possible without risk. Investors who opted for "safe" havens for their money during that decade barely kept pace with inflation.

Importance of Educating Consumers About Investment Risk

More than half of American households (56%) fall below where they should be in investing for retirement (Consumer Federation of America and DirectAdvice.com, 2000). Americans are living longer, resulting in unprecedented lengthy retirements. Fewer than half of American households own stocks (West & Spellman, 1999), which suggests that the other half of the investors are missing out on the growth potential of equities essential to retirement security.

Since risk tolerance appears to be linked to educational level (Grable & Lytton, 1998), and stocks are essential for reaching long term goals, effectively communicating the importance of investing in risky assets may make the difference between austerity and an adequate retirement. Equally as important is emphasizing diversification as a risk reduction measure.
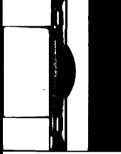
Recommendations for Consumer Educators

Educators should use the risk scale developed by Grable and Lytton (1999) in investment classes. Many investors need education and encouragement to invest in stocks. In fact, Clements (2000) refers to the standard notion of using risk tolerance to determine how to invest as a "dangerous idea." "If we slashed our stock-market exposure every time we felt queasy, we would buy high, sell low and garner disastrous investment results" (Clements, p. C1).

A risk test is an effective way to introduce the risk tolerance concept, but the test represents only a first step. Professionals need to educate students about the many aspects of risk, the dangers of investing too conservatively, and the importance of matching investments with time horizons. When discussing investments and risk tolerance, it is essential to differentiate between savings and investments. While savings instruments offer a guaranteed return with no risk of loss of principal, there is no inflation protection or potential for real growth in purchasing power. Federally insured savings instruments are suitable only for short term goals and a cash reserve. Growth in excess of the rate of inflation is essential to attain long-term goals. Historically, stocks are the vehicles that provide these returns.

Although researchers question whether women are instinctively more risk averse than men, a comparison of asset holdings suggests that many women need to allocate more money to stocks. Thus, educators should target women for workshops on the nature of financial risk.

Clements (2000) provided a framework for understanding and assessing risk in order to match risk tolerance to goals based on time horizons. Behavioral researchers have suggested that tolerance for

risk varies with the vicissitudes of the stock market, so investors have focused on short-term volatility rather than long term returns. Clements suggested that in lieu of concentrating on risk tolerance, investors should focus on four investment steps:

1) concentrate on goals rather than risk;
2) determine the returns needed to reach goals and select investments accordingly;
3) match the investment to the time horizon of the goal; and
4) regardless of risk tolerance, invest 50-90% of assets in stocks for long-term investments.

As Clements recommended and Sung and Hanna (1996) illustrated, stocks should be part of everyone's portfolio for goals at least five years away. Time horizon may well be the most important variable related to risk and to goal attainment. Educators should discourage investors from watching the markets and their investments too closely. Volatility should be of little concern to investors with long term goals and diversified portfolios. While historical returns represent no guarantees for the future, they are the best predictors. For an investor five or more years from retirement, fixed income investments should be limited to a small proportion of the portfolio. In a country with a negative savings rate, very few investors have the luxury of reaching their goals with "risk-free" investments. Thus, consumer educators need to expand upon the components of investment risk and urge those with conservative tendencies to learn more about the risk-return relationship. Selected educational resources are listed in the appendix.

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Your risk tolerance. (2001). http://personal.vanguard.com/educ/
    inveduc.html Select: Course 4: The basics of asset allocation;
    Your risk tolerance.

Appendix: Selected Educational Resources

Determining your investment risk tolerance. http://www.hec.
ohio-state.edu/hanna/risktest/

Grable, J., & Lytton, R. H. (1999). Financial risk tolerance:
Results of a concurrent validity analysis. *Proceedings of the Association
for Financial Counseling and Planning Education*, 65-75. Appendix A:
13-item risk tolerance instrument.

Managing your expectations for long term success in the stock
market. Securities Industry Association. http://www.sia.com/
publications/pdf/myebro.pdf

Opdyke, J. D. (2000, July 14). Bumpy market reminds investors
to assess their risk tolerance. The Wall Street Journal, C1, C11. Risk
advisor instrument based on behavioral research.

Your risk tolerance. (2001). http://personal.vanguard.com/
educ/inveduc.html. Select: Course 4: The basics of asset allocation;
Your risk tolerance.

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