

GAME SHOW EVIDENCE ON ATTITUDES TO RISK

People tend to be risk averse. But they are also overconfident: if the real chances of success in a risky endeavour are two-thirds, people typically perceive the chances as being 15% higher than that. These are the findings of new research by Dutch economics professors **Roel Beetsma** and **Peter Schotman**, who have measured people's risk attitudes using data from a Dutch TV game show called *Lingo*. Their work points to the potential usefulness of policies that discourage people from excessive risk-taking in financial markets or taking out excessively large mortgages.

It is well known that people dislike risk, the researchers observe. The more they dislike it, the higher their demand for insurance. Risk aversion also determines their demand for risky investments like stocks and, therefore, the price of stocks. Yet until now, there has been little direct evidence about people's attitudes towards risk.

Lingo is word-guessing game that is on Dutch TV every weekday. In the first part of the game, two couples play against each other and the one that guesses most words proceeds to the 'final'. The final consists of a maximum of five rounds and at the start of each round, the couple decides whether to stop and take home the money they have won so far or to proceed. If they proceed and do not survive the new round, they lose everything. If they survive, their gains double. Their chances of surviving the round depend on the number of attempts needed to find a five-letter word. Moreover, these chances get lower with every new round. At some point, they may become so low that the couple decides to leave the game. The players' decision ('stop' or 'continue') at the start of each round thus provides us with information about their attitude to risk.

Usually, evidence about risk aversion is obtained from surveys, where people are asked what they would do in particular situations. The *Lingo* game offers very different evidence. For most people, substantial real money is at stake, and because the game has been on TV so long, they very well know the simple rules and the risks involved.

The researchers express the results of their estimates for the players' risk attitudes in terms of what are known as elementary lotteries. An example is a lottery that gives players the choice between receiving €1,000 with certainty or taking a bet in which they can double the money or lose everything. The results from the *Lingo* data indicate that for players to be willing to take the bet, they need a winning chance of approximately two-thirds. That means that they are risk averse.

In an extension of the analysis, Beetsma and Schotman allow for the possibility that the players' perceived survival chances deviate from their *actual* survival chances. Their estimates suggest that, if the true probability of success is two-thirds, the players' perceived success probability exceeds the true probability by as much as 15%.

This finding of *overconfidence* confirms results from other studies and points to the potential usefulness of policies that discourage people from excessive risk-taking in financial markets and taking out excessively large mortgages. Such policies may include explicit warnings by sellers of these products. For example, TV advertisements for financial products in the Netherlands now include a warning that 'successes in the past are no guarantee of future successes'.

Notes for Editors: 'Measuring Risk Attitudes in a Natural Experiment: Data from the Television Game Show *Lingo*' by Roel Beetsma and Peter Schotman is published in the October 2001 issue of the *Economic Journal*. Beetsma is at the Department of Economics, University of Amsterdam, Roetersstraat 11, 1018 WB Amsterdam, the Netherlands; Schotman is at the University of Maastricht, also in the Netherlands. Both are Research Fellows of the Centre for Economic Policy Research (CEPR).

For Further Information: contact RES Media Consultant Romesh Vaitilingam on 0117-983-9770 or 07768-661095 (email: romesh@compuserve.com); or Roel Beetsma on +31-20-525-5280 (fax: +31-20-525-4254; home: +31-252-232-652; email: Beetsma@fee.uva.nl).