Borrowing Behavior and Attitudes towards Risk and Time：Experimental Approach

Ritsumeikan University　Hiroshi Izawa
Kinki University　Grzegorz Mardyła

We investigate experimentally potential links between individual propensity to borrow and attitudes towards risk and time, the latter represented respectively by risk aversion coefficient and individual discount factor. To obtain both above-mentioned measures we employ a joint elicitation procedure using a multiple price list design. We further employ a novel experimental construct akin to a consumption/financial planning setting to examine individual propensity to borrow.

Straightforward cross-analysis of our participants' intrinsic attitudes towards risk and time against their exhibited borrowing behavior allows us to conclude that it is the individual discount factor and not the risk aversion coefficient that could potentially explain and predict individual borrowing. Whilst we find no correlation between diversity in risk attitudes and inclination to borrow, higher individual discount factors correlate significantly with number of loans undertaken. Moreover, this is only the case whenever depreciation rates on the available consumption bundle match individual discount rates – discount factors have no predictive power if the discount rate on the value of consumption is exogenously set.

From the methodological perspective, this project offers support to the technique of artificially shrinking a time-frame in a decision task in economic experiments. The consistency between individual discount factors elicited in one stage of the experiment and the decisions made in a later stage in a consumption/borrowing game based on the earlier elicited coefficients strongly indicates viability of experiments with reduced time-frames.

Finally, our results can be put to immediate practical use in the consumer finance industry and have potentially important implications for policy-making. Knowledge of individual time preferences should allow for better loan provision and more effective regulations of the banking and finance industries.