<u>Emerging strategies when facing uncertainties: Mr Banks game as a case study</u> Josep Perelló, Mario Gutiérrez-Roig, Jordi Duch

Decisions taken in our everyday lives are based on a wide variety of information so it is generally very difficult to assess what are the strategies that guide us. Stock market therefore provides a rich environment to study how people take decision since responding to market uncertainty needs a constant update of these strategies. For this purpose, we run a lab-in-the-field experiment where volunteers are given a controlled set of financial information -based on real data from worldwide financial indices- and they are required to guess whether the market price would go up or down in each situation. From the data collected we explore basic statistical traits, behavioural biases and emerging strategies. In particular, we detect unintended patterns of behavior through consistent actions which can be interpreted as Market Imitation and Win-Stay Lose-Shift emerging strategies, being Market Imitation the most dominant one. We also observe that these strategies are affected by external factors: the expert advice, the lack of information or an information overload reinforce the use of these intuitive strategies, while the probability to follow them significantly decreases when subjects spends more time to take a decision. The cohort analysis shows that women and children are more prone to use such strategies although their performance is not undermined. Our results are of interest for better handling clients expectations of trading companies, avoiding behavioural anomalies in financial analysts decisions and improving not only the design of markets but also the trading digital interfaces where information is set down. Strategies and behavioural biases observed can also be translated into new agent based modelling or stochastic price dynamics to better understand financial bubbles or the effects of asymmetric risk perception to price drops. Full paper available: http://arxiv.org/abs/1604.01557

Website: <u>mr-banks.net</u>