

Lessons from Experimental Economics:

The European Workshop on Experimental und Behavioral Economics (EWEBE)

“Information, Communication, Transparency: Foundations for Financial Decisions”

Transparency is an important input into the stability of a financial system, and the lack of transparency constitutes a dangerous trigger for crisis. Lacking transparency over the value of assets could indeed have contributed strongly to the great crisis the world economy has been suffering from over the last few years. This applies to sub prime real estate and government bonds alike. When investors and consumers are lacking information about relevant parameters, such as the profitability or risk exposure of assets or the behavior of the people managing them, a financial system will ultimately be destabilized.

A recent workshop co-organized by SAFE’s Transparency Lab brought together views on some of the behavioral foundations for transparency. 44 experimental economists (including 19 PhD candidates) from nine countries presented and discussed their related work. The lessons implied by the presentations related to the question of how investors make financial decisions, the costs and benefits of delegated regulation, and the emergence and implications of money illusion.

Boundedly Rational Investors and Financial Decision-Making

It is often argued that the stability of financial markets is undermined by small investors’ irrational behavior. These investors may not make sound financial decisions, because they lack the expertise required to deal with complex decisions. Acquiring this expertise is difficult when investors cannot precisely assess how their effort in improving financial decisions affects the performance of their investment portfolio. Large levels of uncertainty and ambiguity thus characterize the link between investors’ effort and return.

The impact of ambiguity in incentives on motivation and performance is investigated by a study carried out by Prof. David Cooper (Florida State University, joint paper with David Blake Johnson, Florida State University). Their field experiment uses *Amazon's Mechanical Turk*, a platform that matches small jobs to individuals, who consequently receive payment for the job. The experimenters varied the extent to which the link between pay and performance was transparent to individual workers, and found that individuals prefer compensation systems with low ambiguity. This suggests that ambiguity in the link between effort and return can have strong consequences for behavior, an insight that is particularly relevant for financial markets where the link between effort, performance, and pay is often very unclear. One implication is that individuals have low incentives to improve their knowledge in financial markets. This may destabilize the financial system if the irrational behavior of small institutional investors spills over to the more rational investment decisions of large funds. Furthermore, individuals may decide not to invest in the financial market at all, with implications for the creation of widespread wealth and the sustainability of the pension system.

Because of their limited knowledge, non-institutional investors often rely on professional financial advice for their investment decisions. Casual evidence and the observed incentive schemes (kick-back) call into doubt whether financial advisors want to offer advice in the best interest of their customers. It is thus an important question whether investors might be able to sort out that their advisors are cheating or withholding important information.

Prof. Jeroen van de Ven (University of Amsterdam; joint work with Prof. Michèle Belot, University of Edinburgh) presented an experiment that investigates in which situation individuals are able to detect lies. In particular, he focused on different kinds of social interactions in his experiment. Here, subjects had a monetary incentive to lie to others, and indeed most of them did so. Interestingly – and in contrast to many results in the psychology literature - he found that individuals are often able to identify when a person is lying. This detection was strongest when individuals had time to interact and to ask questions. This suggests that individuals might be able to detect bad financial advice, with the interesting implication that too much trust between a small investor and a financial advisor may be bad, while a healthy dose of skepticism may improve investor performance.

To improve financial decisions, regulators often force banks to provide consumers with more information on financial products. Standard theory would suggest that in non-strategic

situations more information never hurts. The reason is that individuals can always decide to ignore additional information. Yet if individuals are boundedly rational, more information might lead to worse decisions, because more information leads to more complexity, and ultimately cognitive overload. Dr. Johannes Abeler (University of Oxford, joint work with Simon Jaeger, Harvard University) showed in a laboratory experiment that individuals are less able in complex environments to identify payoff-maximizing solutions, and are thus more likely to make mistakes. Their results imply that high complexity of the choice environment can severely restrict the effectiveness of policy interventions. They further suggest that financial information has to be presented in ways that are easily understood, to make sure that investors' cognitive limitations do not lead to bad decisions, and yields support to a regulatory approach that does not only define what and how much information needs to be provided, but also in what form, for instance by using graphical representations such as dashboards, risk maps etc.

Centralized or Decentralized Regulation

The Euro crisis clearly demonstrates that a common currency requires more coordination among its member states. But local governments might have detailed information on their banking system, which is a necessary input for efficient regulation. This raises the question whether any regulation of the financial sector should be centralized at the ECB or largely delegated to the different member states.

This problem of centralization versus delegation was the main topic of Prof. Jordi Brandts (Universitat Autònoma de Barcelona; joint work with Prof. David Cooper, Florida State University) in his talk. He argued that the fundamental trade-off between centralization and decentralization is whether to have better information or better coordination. For instance, when a manager of a branch of a retail bank reports to a central authority that decides on some bonus payment, she might have an incentive to misreport. Decentralization could be a way to avoid such misreporting. Coordination between different branches is, however, much more difficult in decentralized organizations. Brandts presented evidence documenting this trade-off in his experimental study. In case of centralization, people started to strategically misrepresent information to their advantage, but the central authority could eliminate all coordination problems. In case of decentralization, coordination was much more difficult. In his experiment centralization outperformed decentralization, essentially because under decentralization, coordination issues turned out to have disastrous consequences. This

suggests that the ECB should be taking a leading role in regulating financial markets in the Euro zone.

Money Illusion and Exchange Rates

One important advantage of the common currency is the elimination of exchange rate risk. However, it turns out that different exchange rates can also affect behavior in a more fundamental and somewhat unexpected way by influencing the outcome of product market competition. Prof. Enrique Fata (University of East Anglia) argued that different prices might emerge in markets if conversion rates are different. He found evidence for such “money illusion” in an experimental market with different conversion rates, showing that homogeneous goods in otherwise identical markets might be traded at different equilibrium prices. He argues that the reason for this finding lies in the prevalence of what are called “prominent numbers.” When setting prices in the range of, say, 1 to 10, prices of 3, 5, and 7 are much more focal than prices like 2 or 4, and are thus chosen more frequently by individuals. If individuals focus on such prominent numbers when competing with others, then the coarseness of the partitioning of the price space depends on the conversion rate which in turn influences equilibrium prices. The study thereby documents another advantage of a common currency, the synchronization of competitive market outcomes via the elimination of different exchange rates.

The above effect of prominent numbers in combination with different exchange rates only works if individuals are prone to money illusion. Prof. Marco Casari (University of Bologna, joint work with Prof. Gabriele Camera, University of Basel) further investigated in a laboratory experiment whether money illusion can also have a positive impact on individuals’ cooperativeness in exchange situations. He found that without money cooperation declines in larger groups. With theoretically completely redundant money, voluntary cooperation turned out to be supported by additional monetary trade. The reason is that otherwise worthless money can become a currency for exchanging trust. This facilitates voluntary cooperation. With money trade thus works equally well in small and large societies. However, norms of reciprocity and inter-temporal exchange of gifts disappear and help is offered only for immediate compensation. The paper demonstrates that we still need to investigate much better how money illusion affects economic exchange.

The papers summarized above provide but a first step towards a better understanding of some of the behavioral foundations of decision-making of managers and investors alike. The Transparency Lab will continue to bring together researchers to generate and discuss knowledge about these foundations.

For people interested in the presentations or underlying research papers, please contact Prof. Guido Friebel (gfriebel@wiwi.uni-frankfurt.de).

The next workshop scheduled, the *First SAFE workshop on Transparency*, will take place in Frankfurt on the 4th and 5th October, 2013.