

EXPERIMENTS ON INTERACTIVE
ECONOMIC BEHAVIOR

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ABSTRACT

This dissertation investigates human economic behavior in contexts which are characterized by different types of human interaction. First, we analyze the effects of introducing asymmetric information in an investment game (Berg et al., 1995), in which the division of an economic surplus between a trustor and a trustee is not contractible. Backward induction suggests that rational self-interested players would not voluntarily engage in any transaction, unless they expect trust and reciprocity to play a role in determining the behavior of their counterparts. In our experiment, only the trustee is aware of the size of the surplus obtained, so the trustor cannot tell if a low back-payment corresponds to a low or a high level of reciprocity. The introduction of asymmetric information in the investment game does not reduce the amounts sent and returned, when compared with previous experimental studies. Moreover, average payback levels increase with the average amount sent. Expectations about other's behavior and risk attitude are also elicited in the experiment. Our results show that the first movers' choices are functions of their expectations about the second movers' payback, and the second movers' choices depend on the difference between the amount the first movers have sent to them and their expectations about this amount. In the second part of the dissertation, we carry out a theoretical and experimental analysis of the problem of double moral hazard arising in a context of asymmetric information. We design a two-stage experiment to analyze a market for durable goods with warranties. In such a market, double moral hazard may arise as the seller can reduce (or increase) the initial quality of the product, while the buyer can reduce (or increase) the maintenance effort. In the first stage of the

experiment, we analyze the impact of the warranty on the equilibrium levels of the product's initial quality and the effort of the buyer. In the second stage, we analyze the role of signaling and reputation in an intertemporal model. There, we show the suboptimality of the equilibria with warranty. We conclude that buyers will accept deviation from equilibrium price induced by sellers of durable goods with warranties. In the third and last part of the dissertation, we design an experiment to study the strategic dependency in two-person iterated zero-sum games, and propose an account of the evidence for large variance in players' win rates across pairs of opponents. Our experiment controls the structure of the interdependence between players. This is achieved by using a computer program as one of the two players. The experimental analysis allows us to distinguish strategic dependence from non-strategic dependence in subjects' play.