

Study: Time Pressure Enhances Thrill of Auctions

Emotions Influence Economic Decisions / Internet Auctions Use This Effect to Offer More Entertainment and Thrill

Shopping is more than the rational exchange of goods against money. Emotions, however, do not only play a role when buying a red sports car or the fiftieth pair of shoes. At the stock exchange or during auctions, bidders also are often influenced by irrational motives. In the current issue of the *International Journal of Electronic Commerce*, KIT scientists point out that the end price of auctions depends on the framework conditions and the emotional pressure of the bidders (DOI 10.2753/JEC1086-4415170201).

The study with more than 90 test persons simulated the so-called Dutch auction that is usually used for selling flowers. The item being sold is initially offered at a very high price. This price is lowered in decrements until a bidder accepts the current price. He gets the item at this price and the auction is completed. "The Dutch auction is clearly structured and dynamic at the same time. It represents an excellent research scenario," explains Dr. Marc Adam of Karlsruhe Institute of Technology. Adam and his colleagues, Dr. Jan Krämer and Professor Christof Weinhardt, found that a rapidly falling price leads to a lower end price and to a higher excitement of the bidders.

Excitement is reflected by the measured heart rates and skin resistances of the participants. "Our experimental setup closes the gap in observation," says Adam. So far, the brain areas responsible for emotions have been examined using magnetic resonance tomographs, while the test persons bade against an electronic counterpart. Or participants in multi-person simulations have reported about their subjective feelings after the auction. Thanks to modern measurement technology, it is now possible to measure highly resolved physiological data of many participants during an auction. "Measurements in a multi-person situation significantly increase accuracy and are much closer to reality," Weinhardt summarizes the added value of the new method.

After calibration, the pulse frequencies and skin resistances measured allow rather accurate conclusions to be drawn with respect to the excitement. In addition, it is possible to verify hypotheses other

Monika Landgraf
Chief Press Officer

Kaiserstraße 12
76131 Karlsruhe, Germany
Phone: +49 721 608-47414
Fax: +49 721 608-43658
E-mail: presse@kit.edu

**For further information,
please contact:**

Kosta Schinarakis
PKM – Science Scout
Phone: +49 721 608 41956
Fax: +49 721 608 43658
E-mail: schinarakis@kit.edu

than quicker auctions leading to lower end prices and enhanced excitement of the bidders. “Our data also show that the bidders, after having reached a certain excitement, try to further enhance their thrill by delaying their bid,” Adam says. Based on the heart frequency and skin conductance, it was also found that winning the auction yields a weaker physiological reaction than going away empty-handed. “In other words: Losing is worse than the good feelings associated with winning.”

The results may also be applied to other types of auctions. Examples are classical auctions, where excitement may lead to the expenses being higher than planned. Or internet auctions that are not simply used to obtain a good required, but also offer entertainment and emotions. “Internet auction platforms are highly skilled in enhancing the thrill, entertainment, and excitement by the course of the auction and advertisements,” says Adam. “In the academic world, by contrast, economic models were based for a very long time on the purely rational human being, the homo oeconomicus. Our study reveals that emotions also play an important role.”

The study is based on a series of auctions among six test persons. Soon a new experimental laboratory for the interaction of up to 40 participants and simultaneous high-resolution measurement of the heart rate, skin resistance, and other physiological parameters will be established with funding by the German Research Council (DFG). “Then, it will be possible to study larger and more complex scenarios in more detail,” says Adam. “Maybe, we will soon be able to study the emotional side of financial markets and other decision-finding processes with many market participants.”

Link to the paper:

<http://dx.doi.org/10.2753/JEC1086-4415170201>

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