

Economic Perspectives on Societal Challenges: Equality of Opportunity, Market Regulation, and Financial Stability - EPoS





# INTERVIEW

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# E-commerce: How Online Ratings Help Consumers To Make Better Decisions

### Interview with Konrad Stahl, EPoS Economic Research Center

Bonn, Mannheim, 29.05.2024 – Consumers regularly consult rating scores before they book a hotel, choose a restaurant, or make an online purchase on platforms such as eBay. Yet, not all buyers actually rate their purchasing experience. Nevertheless, researchers find that even a small number of buyer ratings can be surprisingly reliable to predict the type of seller a consumer is dealing with. These results of a new study by the EPoS Economic Research Center are published in the discussion paper "Learning from Online Ratings".

### Mr. Stahl, how many online ratings are needed to get a good idea of your seller?

**Konrad Stahl:** The results of our study show that a relatively low number of ratings is sufficient to predict whether the seller is of high or low quality, i.e., reliable or not. Buyers are able to take informed decisions even if there are less than 20 ratings.

We find that after 25 transactions, the likelihood of correctly predicting the seller type is already above 95 percent. By that time, sellers have received about 17 ratings.

### Based on your results, would you recommend consumers to rely on online ratings?

**Konrad Stahl:** Our findings suggest that consumers can rely even on a small number of buyer ratings if certain conditions are met: first, ratings must be based on actual purchases. Second, ratings must not be manipulated by sellers in their own interest. Whether these conditions are met in real life is of course difficult for individual buyers to verify. That's why a certain amount of caution is always advisable. Consumers are well advised to be watchful of manipulation. At the same time, it is up to the platform operator and the responsible consumer protection agency to take action against fake ratings.



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### How did you arrive at your results?

**Konrad Stahl:** We have developed a theoretical model of rating behaviour whose predictions we then compare to the empirical results obtained with administrative data from eBay – one of the most established online marketplaces. Its feedback system allows buyers to give positive, neutral, and negative ratings.

We find that two of our central predictions of the model are in line with patterns seen in the eBay data: first, earlier transactions, with only very few other ratings available, are more likely to be rated than later transactions. Second, a negative shock to beliefs about seller quality leads to an increase in the likelihood that the seller will be rated and, excluding correlated seller behaviour over time, the likelihood is larger that the second rating is negative than that it is positive.

Let me explain the last point in more detail: A buyer's belief about the quality of the seller is informed by the existing public rating record. The buyer's own experience is then an additional source of information. We see in the data that the buyer is more inclined to share this information, the more her buying experience changes the prior belief about the seller quality. In other words, a buyer is more inclined to rate the seller if the experience was not in line with expectations. This implies that ratings are indeed informative.

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The presented discussion paper is a publication without peer review of the Collaborative Research Center Transregio 224 EPoS. Access the full discussion paper here: <u>https://www.crctr224.de/research/discussion-papers/archive/dp532</u>

Find the list of all discussion papers of the CRC here: https://www.crctr224.de/research/discussion-papers.

### Authors

Xiang Hui, Assistant Professor of Marketing, Washington University in St. Louis
Tobias J. Klein, Professor of Econometrics, Tilburg University
Konrad Stahl, Senior Professor of Economics, University of Mannheim and member of EPoS Economic Research Center

### The Collaborative Research Center (CRC) Transregio 224 EPoS

Established in 2018, <u>the Collaborative Research Center Transregio 224 EPoS</u>, a cooperation of the universities Bonn and Mannheim, is a long-term research institution funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG). EPoS addresses three key societal challenges: how to promote equality of opportunity; how to regulate markets in light of the internationalization and digitalization of economic activity; and how to safeguard the stability of the financial system.

### **Press Contact**

econNEWSnetwork Sonja Heer Telefon + 49 (0) 40 82244284 Sonja.Heer@econ-news.de

### Contact

Prof. Konrad Stahl University of Mannheim konrad.stahl@uni-mannheim.de

### CRC TR 224 office, Marja Eisheuer

phone | +49 228 737926 e-mail | crctr224@uni-bonn.de

www.crctr224.de