The yet different: the effects of vividness in a laboratory asset market

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WHAT IS VIVIDNESS?
In psychology, displays of information are called vivid if they are more proximate, emotionally engaging and imagery producing (Nisbett and Ross, 1980). In social psychology, vividness sometimes refers to the ease and conviction with which something is recalled in memory. Vividness is often mentioned alongside salience and availability as being able to draw attention. However, the most common of the latter are different. Salience originates from attribution, availability from probability and vividness from persuation. The three concepts reinforce each other in capturing attention and are essential in news building. They overlap partially and can be hard to disentangle in practice outside their theoretical construct. Hence an experiment.

RESEARCH OBJECTIVES:
At a behavioral level we examine the impact of vivid attributes on trading and how these transcend the market mechanisms. From a broader societal perspective, we identify what stimulates individuals towards meaningful societal interactions through market environments and suggest how media, both traditional and machine learning, assist this process.

EXPERIMENT:
Participants play a computer game, indicating whether they want to buy or sell shares including limit order price and quantity. All participants indicate their willingness to trade, the market clears by maximizing volume. Participants repeat this 40 times. While trading, information generated from two sources (system and social) are presented to participants. We are interested in how participants react to this information. System content consists of a directed flow of information pulses about future cash flows, while social content is constructed by collecting feedback responses from the participants during the experiment. We design treatments to influence the attention participants exhibit by switching information carriers from vivid to non-vivid modes and vice versa without changing content or context.

HYPOTHESES:
H1: Vivid treatment of information leads to more attention and thicker order book components

H2: Vivid portrayals of information interact with the sentiment participants declare (see paper)

H3: Vivid treatment of system information adjusts priors

H4: Vivid treatment of social content confirms priors

HYPOTHESIS:
Vividness is different from salience and availability. Vividness forms a triptych with salience and availability

Individual responses to vivid information indicate more attention and engagement, resulting in more willingness to trade.

Effects of vividness on individual responses transcend the market clearing mechanism to also affect market variables.

WHY IS THIS IMPORTANT?

To some individuals the usefulness and interpretation of numerical data depends on the presentation form.

Some participants react differently to vividly presented information than to non-vivid information.

Understanding the effect on participants is important when designing and managing trading platforms (market microstructure, the mix of human and algorithmic trading), when releasing company statements, and when reporting data as financial press (classic and AI).

SOME REFERENCES


