

Can the psychology of scarce attention help explain why nobody saw the financial crisis coming? And does cognitive science suggest that economists' assumption of rational decisions is fundamentally flawed?

At a recent workshop at the Toulouse School of Economics, researchers described the phenomenon of 'inattention blindness', whereby people looking at a scene fail to see the obvious. 'Seeing' is not a matter of looking at an internal representation of the outside world, but rather depends on an active cognitive process of paying attention to certain things. The structure of the brain, whereby neurons at different levels compete with each other to move up to higher levels of the brain, determines what we pay attention to.

One consequence of this inbuilt scarcity of attention is that attention can be guided by setting appropriate goals and stimuli. This can apply to helping an air traffic controller focus attention by suitable colour coding of visual screen displays – or potentially to helping financial regulators monitor developments in financial markets.

Attention is a key factor, too, in the effectiveness of advertising. Participants in the conference described research indicating that:

- Subliminal advertising and suggestion is ineffective;
- Online advertising does work, with the amounts advertisers pay for slots at different locations on the screen a measure of the value of attention;
- Offline ads are not more expensive than online ads, comparing the price of attention, as people spend many more minutes reading a newspaper or magazine than they do reading online;
- Targeted online ads are often less effective than generic advertising;
- Junk email could unravel the market for direct email advertising, but the collapse of the market could be averted by a message tax.

Economists at the conference acknowledged the limitations of their conventional rational choice approach to modelling, even though there is as yet little overlap between the science of attention and assumptions about economic decisions. Paradoxically, the kind of models economists use to describe competition might apply better to the non-deliberative competition between neurons taking place in the brain.

Participants included: Tyler Cowen, George Mason University; Martin Eimer, Birkbeck College, University of London; Luis Garicano, LSE; Kia Nobre, University of Oxford; Kevin O'Regan, Lab Psychologie de la Perception, CNRS, Univ. Paris Descartes; Geraint Rees, University College London; David Reiley, Yahoo! Research; Paul Seabright, IDEI - TSE; Hal Varian, Google.

Detailed summary of the workshop: www.idei.fr/doc/conf/psy/2011/summary.pdf

Workshop web pages: www.idei.fr/display.php?a=24726

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