

Referee Report: 'Decision Making in Times of Knightian Uncertainty: An Info-Gap Perspective', by Yakov Ben-Haim and Maria Demertzis

I'm afraid I found this to be a very poor paper. It is littered with jargon, and is very hard to follow beyond the simple textbook description of risk vs uncertainty in the initial sections. I found the bank portfolio example impenetrable.

An underlying problem, I think, is the disconnect between the initial sections and the bank portfolio example. The authors position the paper in the introduction as a practical guide for policymakers acting under uncertainty. They describe the forecasting failures that occurred during the crisis and the importance of understanding when conventional models serve us well and when they don't. But the meat of the paper offers no practical insights into this problem. One suggestion for the authors is to work harder to make more of a link between these parts of the paper.

The decision-making principle put forward by the authors is one of 'robust satisficing' – decisions should offer satisfactory (ie not optimal) outcomes across a range of states. While this seems like a potentially attractive basis for action, the reader is left with little sense of how and indeed whether this principle can be made operational. How should the policymaker go about choosing feasible minimal acceptable outcomes for instance? There's an old story of a man who could shoot, but who had poor eyesight and decided that to protect his property he would use a shotgun to take out the entire wall if confronted with a possible intruder. But how should he decide which wall to aim at? In other words, you need to know something about the structure of the model in order to come up with any answers.

I found the trade-off between confidence and performance described by the authors quite intuitive. I wonder whether another example of this trade-off might be the process of setting capital requirements for a bank: the higher the requirement, the more insurance there is against losses and the lower the risk of catastrophic outcome, but the greater the drag on economic activity in all states. And how should the policymaker think about trading off these characteristics?

To make the paper more accessible to readers, I would strongly encourage the authors to expand section 2.1 and develop the key concepts used later on in the paper via simple example. For instance, one might think that, across models, the worst possible outcome for the economy over the next 3 years would be a contraction in annual GDP by say 5%, say. The familiar min-max approach requires the policymaker to set policy to ameliorate this outcome. How would the info-gap approach differ in this case?