

Review of: "Subjective Probability Theory for Decision Making"

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Potential competing interests: No potential competing interests to declare.

The paper explores how subjective probability, defined using de Finetti's approach and based on willingness to pay, can address paradoxes in expected utility theory.

Strengths:

- **Focus on Subjective Probability:** The paper sheds light on the concept of subjective probability using the de Finetti framework. It emphasizes the role of willingness to pay and the importance of consistent units of measurement, offering an alternative perspective on probability assessment.
- **Addressing Paradoxes in Expected Utility Theory:** The paper explores how subjective probability can potentially resolve paradoxes within expected utility theory, highlighting a promising path for advancing decision-making models.

Areas for Improvement:

Practical Implications: The discussion on practical implications could be strengthened by:

- **Concrete Examples:** Including specific examples of how subjective probability assessments based on willingness to pay can be applied in real-world decision-making scenarios. This would enhance the paper's relevance for a broader audience.
- **Limitations and Challenges:** Discussing potential limitations and challenges associated with measuring willingness to pay in real-world settings would provide a more nuanced understanding of the framework's practical application.

St. Petersburg Paradox and Critique of Expected Monetary Value (EMV):

- **Relevance and Significance:** The paper could elaborate on the St. Petersburg paradox's relevance within the context of subjective probability. Explaining how the paradox highlights limitations of expected monetary value (EMV) would strengthen the argument for using subjective probability as a potential solution.
- **Detailed Critique of EMV:** A more detailed critique of EMV, explaining its shortcomings in dealing with the St. Petersburg paradox, would further strengthen the rationale for Lahiri's alternative approach.

Novelty and Contribution: The paper would benefit from a more explicit discussion of its originality and contribution. How does Lahiri's work advance the use of subjective probability for addressing paradoxes in expected utility theory compared to existing research?

Recommendations:

- Strengthen the discussion on practical implications by:
 - Including specific examples of applying subjective probability assessments in real-world decisions.
 - Discussing limitations and challenges associated with measuring willingness to pay.
- Elaborate on the St. Petersburg paradox and critique of EMV by:
 - Explaining the relevance and significance of the St. Petersburg paradox in the context of the paper.
 - Providing a more detailed critique of EMV and its limitations.
- Address the paper's originality and contribution in the introduction.

Overall Assessment:

Lahiri's paper offers a valuable exploration of subjective probability based on willingness to pay and its potential for addressing limitations in expected utility theory. By incorporating the suggestions above, particularly regarding the practical implications and a more nuanced discussion of the St. Petersburg paradox, Lahiri can significantly enhance the paper's impact and clarity for readers interested in subjective probability and decision-making frameworks.