

The inherent uncertainty of money: A quantum game approach

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The presentation is structured as a mind-boggling teaser that introduces the idea that money is actually the most uncertain asset in our modern financial economy. Background: axiomatic, formal microeconomic theories do not account for the concept of money. This is known as the Hahn problem. Those theories rely instead on the concept of *numéraire*, which express the value of goods and services in relation to a single, arbitrarily chosen standard commodity. This implies that the concept of value is deterministic. However, we live in a world where values (e.g., prices, costs) fluctuate. Usually, this is modelled by assuming that the inherent value of goods and services varies. I am suggesting an alternative model whereby it is the inherent value of money that varies. Method: structured as a purely conceptual discussion, the presentation will first introduce one simple game, the flip-flop game, to explain how value can be framed statistically. Then, it proceeds by introducing the idea that a standard for measuring value is possible which is inherently uncertain. That particular standard will be associated with the concept of money. Objective: the presentation is intended to test the possibility of conveying to a lay audience a counter-intuitive concept without using mathematics. To do so, reference is made to a simple flip-flop game between two agents. Outline: the Hahn problem; the *numéraire* concept; a flip-flop game without money; a flip-flop game with money; discussion/conclusion. Results: if I can feel any sort of empathy from the audience, I would then proceed to work on a paper aimed at being published somewhere. If not, I'd just drop the idea.