Quantum Econometrics: How to Explain Its Quantitative Successes and How the Resulting Formulas Are Related to Scale Invariance, Entropy, and Fuzziness

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Abstract. Many aspects of human behavior seem to be well-described by formulas of quantum physics. In this paper, we explain this phenomenon by showing that the corresponding quantum-looking formulas can be derived from the general ideas of scale invariance and fuzziness. We also use these ideas to derive a general family of formulas that include non-quantum and quantum probabilities as particular cases – formulas that may be more adequate for describing human behavior than purely non-quantum or purely quantum ones.

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