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UPDATING CHOQUET VALUATION AND DISCOUNTING INFORMATION ARRIVALS

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Updating Choquet valuation and discounting information arrivals*

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Abstract

We explore different possible definitions for conditional Choquet integrals and their implications for updating capacities. Many recent works consider relaxing dynamic consistency within Choquet Expected Utility models, but all of them deal with models where time is not explicitly introduced. We confront the different definitions with dynamic consistency when information arrives along with time through a Choquet version of the Net Present Value. We show that only one definition is dynamically consistent in a decision model where time is discounted according to the agent's preferences. However, it violates consequentialism because all future outcomes must be taken into consideration.

Keywords: Conditional Expectations, Updating, Choquet Expected Utility, Learning, Dynamic Consistency, Discounting.

JEL: D 81, D 83, D 92, G 31.

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