RETHINKING RISK: THE IMPACT OF ACTION ON UNCERTAINTY





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Qualitative view reflected by quantification

PERSONAL AND CONTEXTUAL DEFINITIONS...

- Probability of damage
- Variance, cVaR
- Hazard, Exposure
- Dread, *feeling*

DIFFERENT FROM MANAGERIAL CONCEPTIONS...

- Mastery over 'odds' of fate
- Has a bearing on success (good risks)
- Is manageable (not a gamble)
- Subject to post decision control

Qualitative view reflected by agency

UNCONTROLLABLE UNCERTAINTY

Actions independent of Uncertainty [e.g. natural events]

CONTROLLABLE UNCERTAINTY

Actions can influence Uncertainty [e.g. large stakes/ inventions]

UNDERSTANDING



Risk = Uncertainty + Outcome + AGENCY

CHANCE of something **BAD** happening **THREAT** of

Value

HARM / DANGER

Uncertainty

'True' probability distribution

Qualitative understanding of uncertainty has implications for risk management.

Model distribution

Gather reliable information

Attempt to influence underlying mechanisms



Reflect a

Causal Decision Theory

measure of risk

LITERATURE:

Control Value/ Knowledge of Outcomes

Hedge/insure/avoid

Control Uncertainty



in a stock

Agent (believes) can control uncertainty (stock price movements) — mitigate risk by: affecting 'true' distribution: Envisaged Acquire stake/ distribution of position on the prices board of the Prior conception of company uncertain prices The agent is confronted by 'causal' uncertainty: extent to which he can influence the 'states'

RESEARCH AIMS TO BETTER MODEL ACTIONS AS A MODE OF GOAL DIRECTED CHANGE



