
Risk and Insurance Economics for Small-Probability-High-Impact Events

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Résumé

The lecture explains the principles of risk management and insurance. The theory exposes a stylized yet rich view of ideal arrangements. The development explains the practical limits and solutions.

Main themes :

1/ Risk aversion, willingness to pay to avoid risk, expected utility and alternative models.

2/ Risk sharing, Pareto-optimal risk sharing, Borch principles, Wilson theory of syndicates.

3/ Actual institutions : insurance markets, reinsurance, derivatives, cat bonds, special purpose vehicles, superfunds, etc.

The special case of spatial risks (small probabilities, limits of insurability, uncertainty, unknowns, liabilities for satellite debris) is discussed all along the lecture.

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