

Call for Papers

Risk Analysis, an International Journal (<http://www.wiley.com/bw/journal.asp?ref=0272-4332>)

Risk Analysis: An International Journals seeks papers for a special issue on “Bridging Financial and Non-Financial Risk Analysis” (Arcady Novosyolov, Guest Editor and Tony Cox, Area Editor). This special issue will focus on advances in financial risk analysis that can also be applied to non-financial risks, and vice versa. The issue is expected to appear in 2012. See www.sra.org/journal for author submission instructions.

The following types of papers will be considered for publication:

- Perspectives (2000-4000 words), including tutorials or papers that synthesize recent developments and apply them to risk assessment, perception, assessment, communication and/or management, especially of health, safety, and environmental risks
- Original research (about 7000 words)

Important dates:

May 31, 2011: papers submitted

September 30, 2011 (approx.): referees' initial decision announcement

December 31, 2011: final papers due

The proposed topics for submitted papers include, but are not limited, to:

- **Quantitative and axiomatic definitions and measures of risk:** How should “risk” be defined and measured for non-financial attributes (such as lives or life-years in heterogeneous populations), psychological outcomes (anxiety, disappointment, regret), and complex, multiattribute outcomes (national security, economic and social stability, way of life)?
- **Coherent risk measures in static and dynamic environments; their generalizations and applications beyond financial risk analysis:** Are the requirements for coherence normatively compelling for non-financial risk? How can frequency-severity definitions of risk be reconciled with conditional value-at-risk and other coherent risk measures?
- **Extensions and generalizations of expected utility theory for unknown or ambiguous probabilities**
- **Insights from behavioral economics and neuroeconomics of decisions under risk**
- **Assigning blame and importance: Methods and measures for attributing risks to specific causes:** Can

epidemiological methods improve/be improved by financial methods for attributing risks to specific events or decisions?

- **Decision optimization techniques for risky systems** (e.g., advances in robust optimization, on-line algorithms, zero-regret algorithms)

- **Evolutionary and learning theories for adapting to unknown and changing risks**

- **Black swan risks and limits of predictability**

- **Portfolio optimization, optimal resource allocation and investment in uncertain projects**

- **Qualitative and quantitative characterization and comparison of risk attitudes:** When should all decision-makers agree that one prospect is “riskier than” another, independent of personal risk attitudes? When is one individual or society objectively more risk-averse than another, and what does this imply for individual and societal risk management of health, safety, and environmental hazards with uncertain and delayed consequences?

- **Methods for managing specific risks:** market, credit, operational, investment, R&D etc

- **Computational and Monte Carlo methods for solving risk management problems**

- **Joint distributions and heavy tails, dependence and copula functions**

- **Choice of discount rates, individual and societal hyperbolic discounting, and evaluation of long-delayed and uncertain consequences**