

Consideration of a stochastic multiplicative model in developing fundamental proactive risk management operations

Panagiotis T. Artikis*

*Section of Mathematics and Informatics
Pedagogical Department
University of Athens
20 Hippocratous Str.
10680 Athens
Greece*

Kostas Agorastos

*Department of Business Administration
University of Macedonia
Thessaloniki, Greece*

Antonios Bouras

*Department of Primary School Education
University of Thessaly
Argonafton and Filellinon
38221 Volos
Greece*

Abstract

From a practical and theoretical point of view it is universally recognized that risk severity, risk frequency and risk duration are the most important stochastic components of the complex concept of risk. The formulation of effective stochastic models incorporating these components can substantially contribute to the investigation and implementation of the various operations of the risk management process. The present paper mainly concentrates on the formulation, establishment of theoretical properties and practical applications in risk classification, risk control, risk retention and other fundamental risk management operations of a stochastic multiplicative model which is based on the three most important stochastic components of the concept of risk.

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*E-mail: ptartikis@googlemail.com

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