

The Fundamental Law of Risk Evaluation (FLoRE)

Russell Sears ASA, CFA, MAAA
Janice Dorn, M.D., Ph.D.

Presented at
2010 Enterprise Risk Management Symposium
Society of Actuaries
April 12-15, 2010

Copyright 2010 by the Society of Actuaries.

All rights reserved by the Society of Actuaries. Permission is granted to make brief excerpts for a published review. Permission is also granted to make limited numbers of copies of items in this monograph for personal, internal, classroom or other instructional use, on condition that the foregoing copyright notice is used so as to give reasonable notice of the Society's copyright. This consent for free limited copying without prior consent of the Society does not extend to making copies for general distribution, for advertising or promotional purposes, for inclusion in new collective works or for resale.

Abstract

The paper argues that Risks Evaluation at its core is a psychological process that can lead to the special type of chaos described in modern Chaos Theory. It will argue that quantification and scientific modeling does not exempt risk assessment from the potential for deep biases.

Quantification and scientific analysis of the assumptions can lead to narrowing of the objectives and focus. Further, it can lead to an appeal to authority, instead of an appeal to observable facts. It will argue that ignoring the psychological aspects to risks evaluation can create a neurotic environment for risk management. The paper will argue that understanding the psychological process can help risk management obtain a more accessible, flexible, holistic view of risks. It will suggest ways to prevent and avoid overreach in quantifying risks.

The Fundamental Law of Risk Evaluation: recognizes the tendency for individuals, businesses and economies to gravitate towards risks that are underestimated/underemphasized and away from those that have been overestimated/overemphasized. These misallocations often create temporarily-distorted risk/reward feedback loops. Short term gains may reinforce faulty risk evaluation and (paradoxically) cause an increased commitment to the model. Moreover, preferential allocation of limited resources can create a strong disincentive to incorporating different ideas and adjusting methods of evaluation.