Instantiating Holism:
Beyond ERM's Half Measures

Christopher Perrin, FSA

Copyright 2008 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

This paper focuses on the role of holism in enterprise risk management (ERM). The performance measure known as market consistent embedded value is discounted for being overly reductionistic. The concept of an economic capital charge or credit is seen here as a potential bridge from the reductionistic to the holistic approach. It shows some promise for achieving holism, but falls short. An alternative performance measure, the Equivalent Logarithmic Utility Value (ELUV), is then described and argued to be a more complete embodiment of holistic risk management. ELUV can be seen as the expected value of a transformed probability measure, and this transformation sheds new light on the economic capital concept. In addition, to the extent the underlying probability models can be relied upon, ELUV can be used to define the concept of optimal capital. However, holism also encompasses how we face uncertainty, and so the extent to which probability models can be relied upon is an issue holistic ERM must address.