

# Sustainability of Earnings: A Framework for Quantitative Modeling of Strategy, Risk and Value

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Presented at the:  
2011 Enterprise Risk Management Symposium  
Society of Actuaries  
March 14-16, 2011

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## **Abstract**

The value of a firm derives from its future cash flows, adjusted for risk and discounted to present value. Much of the existing literature addresses the quantitative techniques for calculating probability distributions of future cash flows, calculating values of risk adjustment factors and calculating values of discount factors. Yet strategy and strategic risk—for example, the risk of adverse consequences arising from the actions of new competitors, governmental intervention or customer changes—often cannot easily be incorporated into this quantitative framework. As a result, strategic concerns are addressed in a parallel track of qualitative analysis, which supplements the quantitative analysis but never integrates with it. The goal of this paper is to propose in detail a quantitative framework in which strategic considerations can be incorporated into a quantitative model of the firm's value. The resulting framework seeks to measure not only the amount, growth rate and variability of earnings but also the firm's "sustainability of earnings" and value in the face of strategic forces.

**Keywords.** Strategy, Risk, Value, ERM, Sustainability of Earnings