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Enterprise risk management and firm performance: A contingency perspective

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ABSTRACT

In recent years, a paradigm shift has occurred regarding the way organizations view risk management. Instead of looking at risk management from a silo-based perspective, the trend is to take a holistic view of risk management. This holistic approach toward managing an organization's risk is commonly referred to as *enterprise risk management* (ERM). Indeed, there is growing support for the general argument that organizations will improve their performance by employing the ERM concept. The basic argument presented in this paper is that the relation between ERM and firm performance is contingent upon the appropriate match between ERM and the following five factors affecting a firm: environmental uncertainty, industry competition, firm size, firm complexity, and board of directors' monitoring. Based on a sample of 112 US firms that disclose the implementation of their ERM activities within their 10Ks and 10Qs filed with the US Securities and Exchange Commission, empirical evidence confirms the above basic argument. The implication of these findings is that firms should consider the implementation of an ERM system in conjunction with contextual variables surrounding the firm.

1. Introduction

Managing risk is a fundamental concern in today's dynamic global environment. In recent years, however, a paradigm shift has occurred regarding the way to view risk management. Instead of looking at risk management from a silo-based perspective, the trend is to take a holistic view of risk

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management. This holistic approach toward managing an organization's risk is commonly referred to as *enterprise risk management* (ERM). A general argument gaining momentum in the literature is that the implementation of an ERM system will improve firm performance (e.g., see Barton et al., 2002; Lam, 2003; Stulz, 1996, 2003; COSO, 2004; Nocco and Stulz, 2006; Hoyt and Liebenberg, 2009). The findings by Hoyt and Liebenberg (2009), for example, based on data from the insurance industry and using Tobin's Q as the measure of performance, support this argument.[1] The fact that many firms have adopted ERM (e.g., see Gates and Hexter, 2005) lends additional support to the view that ERM will improve firm performance. Nevertheless, empirical evidence confirming this relation between ERM and firm performance is quite limited and is not based on a robust measure of ERM.

The primary objective of the study reported in this paper is to examine empirically the argument that ERM is related to firm performance. We argue that the ERM-firm performance relation is contingent upon the appropriate match between a firm's ERM system and several key firm-specific factors. Based on the relevant literature, we identify five specific firm factors that are believed to have an impact on the ERM-firm performance relation. These factors are: (1) environmental uncertainty, (2) industry competition, (3) firm complexity, (4) firm size, and (5) board of directors' monitoring. In pursuing the above objective, we also develop an ERM index. To our knowledge, we are the first to develop such an index.

The analyses presented in this paper are based on an empirical study of 112 US firms that disclose their ERM activities in their 10K and/or 10Q reports for 2005 with the US Security and Exchange Commission (SEC). The findings from this study provide strong evidence that there is a positive relation between ERM and firm performance, but that this relation is contingent upon the appropriate match between a firm's ERM system and the five factors noted above. These findings are robust to such concerns as the self-selection problem, the effectiveness of a newly constructed ERM Index, different measures for monitoring by the firm's board of directors, and different measures of firm performance.

The remainder of this paper will proceed as follows. In section two we develop the basic argument and research design underlying the empirical study discussed in this paper. The empirical study designed to test this argument is discussed in the third section of the paper. The fourth section of the paper presents the main results of the empirical study. The fifth section provides robustness checks for the main findings. The sixth section of the paper provides some concluding comments.

2. Basic argument and research design

2.1. Basic argument

An increasing number of scholars view ERM as the fundamental paradigm for managing the portfolio of risks confronting organizations (e.g., see Lam, 2003; Liebenberg and Hoyt, 2003; Nocco and Stulz, 2006; Beasley et al., 2008; Hoyt and Liebenberg, 2009). Driving this trend is the belief that ERM offers companies a more comprehensive approach toward risk management than the traditional silo-based risk management perspective. By adopting a systematic and consistent approach (or process) to managing all of the risks confronting an organization, ERM is presumed to lower a firm's overall risk of failure and thus increase the performance and, in turn, the value of the organization. The presumed link between a holistic approach to risk management and an organization's performance/value is clearly noted in the following definition of ERM provided by the Casualty Actuarial Society Committee on Enterprise Risk Management (2003, p. 8):

> ERM is the discipline by which an organization in an industry assesses, controls, exploits, finances, and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders.

[1] Exceptions to this argument, however, do exist. For example, see Pagach and Warr (2009).