“Enterprise Risk Management: An Empirical Analysis of Factors Associated with the Extent of Implementation”

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Synopsis by William Reimer

Introduction

The definition of enterprise risk management as provided by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) is

> *[A] process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives* (COSO, 2004).[1]

Because little is known about the stages of ERM deployments or the factors associated with the embrace or rejection of ERM within an organization, this study focuses specifically on such factors. Corporations in the US have lagged behind the rest of the industrialized world in ERM advancement.[2] Motivated by numerous corporate financial reporting scandals company and stakeholders demand for greater oversight of key risks, there is increasing importance on the extent that a company implements ERM. Beasley, Clune, and Hermanson examine the adoption of enterprise risk management (ERM) as a model for managing the numerous risks that organizations confront along with the reasoning behind a company's implementation of ERM. The extent of ERM implementation within a firm was measured on a 1 to 5 scale based upon the respondent's response to a survey question about degree of ERM deployment. The authors of the study focused both on the adoption of ERM, which is becoming the norm in large public corporations, but also on how advanced companies were in ERM implementation. The study found that ERM implementation is positively correlated to the presence of a chief risk officer, board independence, CEO and CFO support, presence of Big Four auditor, and entity size.

ERM Factors

The authors surveyed chief audit executives who answered relevant questions for the study. The actual polling was done by the Institute of Internal Auditors (IIA) who conducted the survey in an online format that was sent to members of the IIA's Global Audit Information Network (GAIN). The survey returned 175 responses for a 10.3% response rate, however the final sample was of 123 organizations due to incomplete data on some of the questionnaires.

The study examined seven different factors that were hypothesized to be associated with implementation within a firm. One of the main factors examined was if the presence of a Chief Risk Officer is positively correlated with the implementation of ERM. One would expect that having a

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[1] COSO, 2004 (page 523)

[2] Beasley, Clune, & Hermanson(page 525)

CRO would make a company more prone to implement ERM due to the expertise and likely CRO fit within an organizational structure. In addition to having a CRO, the researchers theorized that a higher percentage of independent board members may also lead to a higher probability of the company implementing ERM. The researchers proposed this hypothesis from research done by Kleffner that showed Canadian companies that adopted ERM did so through encouragement from the board of directors.[3]

While the board of directors may have an important role in influencing the implementation of ERM, management is the driver behind the actual implementation and practice of ERM within a corporation. Without management's support and direction ERM cannot succeed in an organization. The study examines explicit calls from the CEO or CFO for internal audit involvement in ERM. This brings to question the relevance of external auditors and the influence that they may have on ERM implementation. The researchers looked at the correlation between the presence of a Big Four auditor and an enterprise's stage of ERM deployment. The researchers theorized that Big Four auditors were more committed to risk management due to explicit calls from industry regulators and leaders. The study also examined the organization size in relation to the implementation and stage of ERM within a company. One would expect that there to be a correlation between company size and Big Four audit presence, in which the two factors may work in tandem to promote ERM. The final two factors that were examined in ERM implementation were the industry that the company was in and the country in which the corporation was headquartered. Industries that have the ability to cause large ripples in the economy, such as banking, were found to be further in ERM implementation due to the inherent risks that shareholders, auditors, and regulators perceived after the various corporate scandals that took place. As industries evolve, the ability to manage risks must evolve with it along with the understanding of the managers that advance ERM within corporations.

Findings

Among the respondents, 31% of entities have a CRO, 76% of board members are independent, and 88% were audited by a Big Four firm. The results of the study, illustrated in Table 1 and created from the authors Table on p. 529.

Table 1

Variable	Exp. Sign	Coefficient	Z Stat	p-Value
Presence of a Chief Risk Officer	+	1.712	3.65	0.00
Significant Board Independence	+	0.021	2.59	0.01
CEO Request for ERM	+	0.413	2.36	0.01
CFO Request for ERM	+	0.295	1.76	0.04
Presence of Big Four Auditor	+	1.806	2.73	0.00
Size of Revenues	+	0.131	1.37	0.09
US Based Corporation	-	-2.509	-5.08	0.00
Industry				
Banking	+	1.764	2.92	0.00
Education	+	1.064	1.56	0.06
Insurance	+	1.467	2.05	0.02

[3] Kleffner et al 2003 (page 50-73)

The hypothesized relationship between ERM implementation and model's independent variables are listed in the "Exp. Sign" column. Coefficient values and p-values show there is statistically significant correlation between ERM implementation and each of the factors in Table 1.

The presence of a CRO was an important factor in the extent of ERM deployment, mainly due to the fact the presence of a "risk champion" in management would influence a corporation to take additional measure to implement ERM. Larger companies that were audited by Big Four firms were also more likely to be further along in the development of ERM as were companies in the banking, education, and insurance industries. The study also found that US companies were less advanced in their implementation of ERM practices compared to other countries where ERM frameworks have been issued. The results of the study show the importance of management support in the implementation of ERM and the presence of an expert within management in order to have effective ERM. While the study provides a broad overview of the reasons behind ERM advancement in corporations it leaves room for additional studies to be done on how ERM enhances and protects shareholder value or what challenges companies face in ERM deployment.

References

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Kleffner, A. E., Lee, R. B. and McGannon, B. (2003), The Effect of Corporate Governance on the Use of Enterprise Risk Management: Evidence from Canada. Risk Management and Insurance Review, 6: 53–73. doi: 10.1111/1098-1616.00020.