The interplay between strategic risk profiles and presentation format on managers' strategic judgments using the balanced scorecard

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A B S T R A C T

Managers are increasingly aware that strategic judgments need to be made in the context of risk assessments. It has been proposed that strategic performance management systems, such as the balanced scorecard (BSC), offer a useful framework for integrating strategic risk and performance information to provide managers with a more comprehensive overview of their strategy. In this study, we conduct an experiment to investigate whether integrating strategic risk information in a BSC affects managers' responses to different strategic risk profiles when making strategy evaluation and recommendation judgments. Specifically, we provide strategic risk information either as a stand-alone list (a stand-alone approach), or incorporated in a BSC (an integrated approach). We also vary the risk profile of the strategy provided, by manipulating whether the strategy has relatively higher risks associated with performance drivers (high performance driver risks) or relatively higher risks associated with performance outcomes (high performance outcome risks). Our results show that managers make less favorable strategy evaluation and recommendation judgments with high performance driver risks than with high performance outcome risks when strategic risk information is integrated in a BSC, but not when the strategic risks are presented as a stand-alone list. While we find a significant difference in strategic risk profile effects between the two presentation formats for strategy recommendation judgments, this difference is not significant for strategy evaluation judgments. Overall, our study shows that how organizations choose to combine the reporting of strategic risk and performance information is important for managers making strategic judgments.

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1. Introduction

An important challenge faced by managers is how to integrate strategic risk and performance information when making strategic judgments (Hall, Mikes, & Millo, 2015; Ittner & Larcker, 2009; Palermo, 2011). Strategic risks are those unintended events or conditions—such as changes in competitors’ behavior, critical errors in internal processes, and loss of technological capabilities—that reduce managers’ ability to implement their intended business strategies (Simons, 2000). Unless these risks are effectively managed, they have potentially significant negative impacts on organizational performance. Consequently, organizations are focusing attention on simultaneously improving their measurement, management and reporting of strategic risks and performance (Ernst & Young, 2012; Frigo & Anderson, 2009; Hall et al., 2015; Kaplan, 2009). While prior accounting research shows that strategic risk information generated from organizational risk management processes is often discussed and examined by managers together with performance information (e.g., Hall et al., 2015), there is limited understanding of the information processing strengths and boundaries of combining performance measures with risk assessment.

Given that strategic performance management systems (SPMS), such as the balanced scorecard (BSC), are designed to provide performance information to help managers monitor and evaluate business strategies (Cheng & Humphreys, 2012; Kaplan & Norton, 2009),...
2004; Tayler, 2010; Webb, 2004), they are considered logical conduits for incorporating information on strategic risks to aid managerial judgments (Frigo & Anderson, 2009; Harvard Business Review Roundtable, 2009; Ittner & Larcker, 2009). Further, some organizations are experimenting with using the BSC as a framework for combining this information (Beasley, Chen, Nunez, & Wright, 2006; Kaplan & Mikes, 2012). In this study, we investigate whether the integration of strategic risk information (hereafter referred to as ‘risk information’) in a BSC affects managers’ evaluation of a strategy’s performance and the likelihood that they will recommend expanding this strategy. Importantly, as individuals’ judgments are often influenced by their causal theories (Luft & Shields, 2009; Rottman & Hastie, 2014), we propose that the presentation structure offered by a BSC alters managers’ causal reasoning when they relate performance information to strategic risks. This has judgmental implications for managers’ response to strategies with different risk profiles (i.e., likelihood and impact of different risks associated with a strategy).

An understanding of strategic risks is relevant to both managers’ strategy evaluation and strategy recommendation judgments. Strategy evaluation judgments involve assessing the current performance of an implemented strategy, where improved performance can be achieved by means of higher strategic risks, thereby affecting the organization’s overall risk exposure and sustainability. Strategy recommendation judgments require an assessment of whether to continue the strategy. In this context, information on strategic risks is relevant as these risks represent factors that may impede the strategy’s successes in the future. For this study, we investigate the joint effect of strategic risk profiles and presentation format on each of these judgments.

To assist managers in making strategic judgments using risk information, some organizations provide their managers with risk reports from specialized risk management departments where risk information is presented in a separate report, but at the same time as other management accounting reports that provide strategic performance information. In contrast, other organizations provide managers with integrated reports that link risk information with strategic performance information (Slagmulder & Boicova, 2012). We refer to the first approach for reporting risk information as a ‘stand-alone approach’ and the reporting practice where risks are integrated with a BSC as an ‘integrated approach’. The presentation format of performance reports has been found to influence users’ judgments and decisions (e.g., Cardinaels, 2008). In particular, findings from prior research on financial statement presentation formats suggest that isolating risk information from performance information (as is the case under a stand-alone approach) has the benefit of reducing the cognitive effort required to process the risk information; however, under an integrated approach, the closer physical proximity between risk and performance information makes it cognitively easier for managers to integrate this information (e.g., Hodge, Hopkins, & Wood, 2010; Maines & McDaniel, 2000). As such, both approaches of presenting additional risk information appear to have benefits in reducing managers’ cognitive effort when making strategic judgments.

In this study, however, we posit that the BSC offers a unique feature that has not been considered by this prior stream of research, and which has implications for managers’ strategic judgments. The BSC is designed based on a set of directed, acyclic cause-and-effect relationships (Cheng & Humphreys, 2012; Tayler, 2010; Webb, 2004). These relationships tell an intuitive story of cause-and-effect relationships (Cheng, 2010) or not (Malina, Nørreklit, & Selto, 2007). When managers are required to incorporate risks in their strategic judgments, they need to expand their understanding of these relationships to include risks in their causal reasoning (Rehder, 2014; Rottman & Hastie, 2014). We argue that the causal structure of a BSC will lead managers to look beyond the basic probabilistic nature of strategic risks (e.g., their likelihood of occurrence) and become more aware of what these strategic risks mean and how they are causally related to an organization’s strategic performance. Drawing on theory and prior research on causal reasoning, we predict that, holding constant the average risk rating across the set of risks associated with a strategy, managers will make less favorable strategic judgments if the risk profile of a strategy is characterized by relatively higher performance driver risks (i.e., strategic risks related to performance drivers) than relatively higher performance outcome risks (i.e., strategic risks related to performance outcomes).

To test our proposition, we conduct an experiment where we manipulate whether information on the risks associated with a strategy is presented either in a separate, stand-alone report, or as part of a risk-integrated BSC (‘strategic risk integration’ manipulation). In addition, we manipulate the strategic risk profiles associated with the strategy under consideration (‘strategic risk profile’ manipulation), such that the risk information indicates that the strategy either has relatively higher risks associated with its performance outcomes (high performance outcome risks), or relatively higher risks associated with its performance drivers (high performance driver risks). We focus on these two types of strategic risk profiles for two reasons. First, the existing literature has emphasized the importance of understanding both performance drivers and performance outcomes when evaluating strategies, suggesting a need to further understand the judgmental effects of strategic risks associated with these two types of performance measures (e.g., Guo, Libby, Wong-on-Wing & Yang, 2011; Kaplan & Norton, 2004). Second, this focus allows us to test whether an integrated approach affects the way managers incorporate strategic risks in their causal reasoning.

We find that under an integrated approach, managers are less likely to recommend expanding the strategy to other business units, when the strategy has relatively higher performance driver risks than performance outcome risks; in contrast, they do not distinguish between the different strategic risk profiles, when the strategic risks are presented as a stand-alone list. When evaluating the strategy, we similarly find that under an integrated approach, managers make less favorable judgments when the strategy has relatively higher performance driver risks than performance outcome risks; and we do not find a difference between the two strategic risk profiles under a stand-alone approach. However, we also do not observe a significant difference in the strategy risk profile effect between the two strategic risk presentation approaches when managers evaluate the strategy. Overall, our results suggest that an integrated approach enables managers to take into account the qualitative nature of strategic risks when making strategic judgments.

Our study makes three contributions to the literature. First, to the best of our knowledge, this study is the first to examine the important judgmental effects from integrating risk information within a BSC. Despite variation in organizations’ approaches to