

# An Empirical Investigation of Business and Operational Risk Disclosures

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## Extended Abstract

Following the recent global financial crisis, risk management and risk disclosure by business companies in all sectors of the economy have gained growing interest in regulation and practice internationally. While a considerable body of literature reflects detailed academic work on risk management particularly in the financial sector, there is still little research on corporate risk disclosure and management in companies in the non-financial sector. Relevant and reliable risk disclosure is expected to lower the information asymmetry between managers and outsiders by providing users of financial reports with information on the risks a company faces and on how these risks are managed. Risk information disclosed cover a broad set of disclosures on risk factors and means of risk management varying in location, risk category, scope, type, and time frame (Lajili & Zéghal 2005, Linsley & Shrivies 2006).

In this paper, we focus on operational and business risks as disclosed by US manufacturing companies and covering a four-year period from 2006 to 2009. We first review the risk disclosure rules in the US and briefly summarize the emerging risk disclosure research. We then set the main objectives of the study namely, to examine how US firms reported on these non-financial risks categories and capture any differences between the extent and nature of business risks from one side and operational risks on the other. We also attempt to document any changes in the volume and nature of disclosures of both business and operational risks before and after the last financial crisis. Finally, we investigate the nature of the association between the intensity (volume) of operational and business risk disclosures (separately and together) and the firm-specific risk proxies such as financial leverage (the degree to which the firm uses debt to finance its operations), beta (or systematic risk), market-to-book ratio (a business risk proxy) and other performance, governance, and size variables (e.g., total assets, return on assets, gross-profit margin, board independence). The following hypotheses are formulated and tested:

**H1.** The intensity, nature, location, time span, and type of operational and business risk disclosures are identical

**H2.** The intensity and nature of operational risk and business risk disclosures increased during and immediately after the financial crisis of 2008.

**H3.** Total business and operational risk disclosures are positively related to the size of the firm, firm-specific and market-based risk proxies, as well as governance indicators.

To test these hypotheses, we conduct a content analysis of 30 US manufacturing firms in 2006 through 2009 by coding the risk information in their annual reports using a coding instrument. We differentiate between operational risk and business risk following prior risk disclosure content analysis research (Lajili & Zéghal 2005, Linsley & Shrivess 2006) and regulatory definitions of operational risk (Basel II). In general, operational risk refers to potential losses caused by internal firm-specific factors and assets such as information systems, business processes and personnel (people) and other related resources. For example, technical failures and the loss of key employees are examples of operational risks. In contrast, business risks are defined as potential losses from external and global factors (usually outside the control of the firm). Examples of business risks include the market and competitive structure underlying the firm's business, government regulations, and political or geo-political risks. We further conduct statistical and regression techniques to test our abovementioned research hypotheses.

The main findings of this study suggest that business risk disclosures far outweigh operational risk disclosures in terms of intensity for every year of the study. Firms seem to say very little especially about how they manage operational risks. This could be due to either difficulties encountered in identifying, assessing, controlling and monitoring this type of risk, or it could be simply due to the fact that most of this information is discretionary and thus voluntary to a large extent. Additionally, we note that most of the risk information disclosed is qualitative, backward-looking, is focused more on listing the risk factors than discussing how they are being managed. These findings are consistent with previous risk disclosure studies and also the regulatory and financial reporting framework. Overall, there was not a significant change in the amount and volume of either risk category in both 2008 and 2009 with the exception of operational and business risk disclosures in the notes to financial statements which decreased on average in 2009 compared to earlier years. Less "favorable" business risk disclosures in 2009 are also documented confirming a less "optimistic" managerial perception of their companies' outlook following the financial crisis. Finally, we find statistically significant associations between some market risk proxies, governance and size, and the quantity of both business and operational risk disclosures.

The study sheds some light on how manufacturing firms dealt with risks in the period leading up to the worst financial crisis since the depression of the 1920s and show a general willingness to provide relevant risk information to outside users. However, the risk information reported seems to focus more on past events, is qualitative in nature and may therefore be limited in informing investors in a timely and effective manner. Future research in this field could further examine how companies should report operational risks (prescriptive research) to help regulators offer more guidance in reporting these important risks and how firms are coping with them which would help improve decision making by investors and other stakeholders.