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Management's causal reasoning on performance and earnings management

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ABSTRACT

We investigate the association between the intensity of causal reasoning on performance in a firm's annual management commentary and its earnings management propensity. Anticipated earnings management concerns are argued to constitute a significant accountability predicament, bringing management to offer more intense causal reasoning in order to mitigate investors' earnings management concerns. We use computer-intensive techniques to measure causal reasoning intensity as a generic disclosure quality in the management commentary of a large sample of US firms from 1999 to 2007. We find that accruals earnings management (signed discretionary accruals) is positively associated with causal reasoning intensity. The positive association holds for alternative specifications of accruals earnings management (an earnings management dummy model and an analyst expectations model) and in a change model. Our results are consistent with the assertion that firms strategically use causal reasoning on performance to establish appropriateness and cognitive legitimacy, increase perceived plausibility of reported performance and mitigate performance-related concerns of investors.

Introduction

We investigate the relationship between causal reasoning intensity as an overall narrative characteristic of management's annual performance commentary and the incidence of accruals earnings management in a large sample of US firms. Earnings management can be broadly defined as the opportunistic exercise of managerial discretion that causes performance reported to external audiences to be different from the true underlying economic performance of the firm (Dechow & Skinner, 2000). Anticipated earnings management concerns are argued to constitute a significant accountability predicament, bringing management to offer more performance explanation as a logic-based, rationale-giving response in order to contextualize and rationalize post-managed earnings and performance (Aerts & Cheng, 2011; Brown & Tucker, 2011; Graham, Harvey, & Rajgopal, 2005).

Causal reasoning is central to management commentary reports, such as the directors' report in the EU and the Management Discussion and Analysis (MD&A) in the US. In management commentary reports, firms not only provide a description of their accomplishments, related accounting outcomes, and prospective statements regarding future developments, but they also frame corporate events and performances by providing explanations in terms of logical interconnections, correlated factors, reasons and causes. Such explanatory statements add argument, meaning and understanding to the more factual information in the financial statements. Both regulators and standard-setters, such as the Securities and Exchange Commission (SEC) and the International Accounting Standards Board (IASB), have insisted on providing more explanation of performance outcomes in management commentary reports. In 2010, for example, the IASB issued an IFRS practice statement on management commentary reports, suggesting that management commentary should provide management's perspective on the business and its analysis of the interaction of the relevant intervening factors to help readers contextualize the firm's financial statements and understand management's objectives and strategies for achieving those objectives (IASB, 2010). Similarly, the SEC argued that the basic requirement for the MD&A is to 'provide such other information that the registrant believes to be necessary to provide an understanding of its financial condition, changes in financial condition and results of operations' (SEC, 2002). Causal reasoning as displayed in management commentary is, however, not neutral. Management commentary is embedded in accountability processes and, as an accountability device, exhibited causal explanation may involve assertions or messages aimed at affecting perceptions of the intended audience. Given the relatively high level of managerial discretion in deciding on the content of the management commentary report, impression management motives may be prominent in configuring commentary content (Aerts & Tarca, 2010).

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Prior studies examining the relationship between accruals earnings management and causal disclosure (Aerts & Cheng, 2011; Aerts, Cheng, & Tarca, 2013) find evidence of a significant relationship between specific explanation types (*e.g.* assertive self-serving performance attributions, explicit causality-based explanations), in small samples or in a specific context (*e.g.* in the prospectus of initial public offerings in China). In this study, we develop and test an overall measure of the intensity of causal reasoning, which is more consistent with how the IASB and the SEC portray the need for more performance explanation, in a large sample context. We extend prior research by investigating whether firms use a logic-based, rational appeal strategy as a coping mechanism to signal appropriateness in the face of accountability threats, and this independently of the content or type of explanations used. In that sense, our results allow a high level of generalizability of the relationship between accruals earnings management and the use of performance-related causal reasoning.

We use signed discretionary accruals as our primary proxy for accruals earnings management. We use alternative specifications of this earnings management measure to test the robustness of our results. Moreover, we investigate whether firms whose pre-managed earnings fail to meet the analysts' earnings expectation benchmark, but succeed in just meeting or beating the benchmark after taking into account discretionary accruals, use more intense causal reasoning on performance. We use automated text analysis procedures to identify and measure the amount and intensity of causal reasoning on performance. Our analysis is based on the MD&A sections of the 10-K filing of listed US firms. Our sample covers an eight-year period (fiscal years 1999–2007). In our analyses we take into account that the relationship between causal reasoning intensity and accruals earnings management might be endogenously determined within a more global disclosure strategy. In addition, we investigate the association between change in accruals earnings management and change in causal reasoning intensity.

Consistent with expectations, our results show a positive and significant association between the intensity of overall causal reasoning on performance and the extent of accruals earnings management in different specifications. Our results are consistent with prior research documenting that especially upward earnings management drives the relationship between accruals earnings management and specific types of causal disclosure. Moreover, we find that firms tend to use more intense causal reasoning on performance when they just meet or beat analysts' earnings forecasts. In addition, we find the association between change in accruals earnings management to be positively and significantly related to change in causal reasoning intensity, providing a primary indication of a causal relationship between accruals earnings management and intensity of performance explanation.

Our study contributes to the literature in several respects. To the best of our knowledge, this study is the first to examine, in a large sample of US firms, the relationship between the intensity of a firm's performance-related causal reasoning in its annual report and its earnings management propensity. Moreover, our results demonstrate the usefulness of a generic measure of causal reasoning intensity as an overall narrative style characteristic to investigate presentational tendencies in management commentary. We document that the generic intensity of causal language use in performance-related management commentary and the strength of accruals management, are closely aligned. The study adds to the earnings management literature by providing corroborating evidence that accruals earnings management drives the need to justify performance changes when the expected earnings management costs are perceived to be high, which is especially so in a strong scrutiny environment such as the US. Whereas prior research shows a relationship between causal disclosure tactics and earnings management in a high achievement context with no prior performance history, such as an IPO, our results indicate that such a tendency is generalizable to a broader, mainstream market context and is not dependent on the absence of a prior performance track record that could limit the scope and credibility of causal reasoning. This study also adds to the impression management literature by evidencing incentives for the opportunistic use of causal reasoning language in periodic reporting and, thus, sheds light on its discretionary use of the use of logic-based rational appeal as a rhetorical strategy. Lastly, whereas accruals earnings management and impression management studies typically examine samples of firms for which the incentives for earnings management are expected to be strong, our sample relates to a more general setting, thus corroborating the robustness and generalizability of our findings.

The remainder of the paper is structured as follows: "Literature review and theory development" presents a literature review and develops the research questions. "Data and Method" introduces the research design and describes our data. "Results" analyses the data and presents the results. "Discussion and conclusion" discusses results and concludes.

Literature review and theory development

Causal reasoning in management commentary

Causal reasoning and argumentation make up a large part of the content of management commentary in annual reports. Causal reasoning on corporate achievements and related performance outcomes usually refer to internal and external causes, although explanations may also be provided in terms of needs and motives and not simply in terms of unintentional causes. For our purposes, the term 'causal reasoning' refers to the whole range of explanations that may arise in a discursive context such as a management commentary report. In practice, they may include technical accounting explanations (Aerts et al., 2013) and effects of changes in the regulatory environment which together with causality-based and motivational explanations constitute a composite signal of logic-based cognitive effort to contextualize performance outcomes.

Causal reasoning in a communicative context is basically about sense-giving (Antaki, 1994) and about the rhetorical use of logic-based, rational appeal to the audience's way of making sense of the situation (Blair, 2012). By connecting events and outcomes to reasons, intervening factors and causes, causal reasoning delineate and typify critical performance attributes on which to judge the appropriateness and reasonableness of the firm's actions and outcomes. This rationale-giving behavior may be especially important in listed firms which act under strong norms of rationality and where the use of proper reasoning can be expected to be effective in demonstrating competence (Gowler & Legge, 1983) and fostering trustworthiness (Sonenshein, Herzenstein, & Dholakia, 2011). In this regard, firms which operate in an environment with considerable ambiguity, are typically perceived as being more effective when they are able to demonstrate evidence of rational and reasoned behavior and provide appropriate causal reasoning (Staw, 1980).

Causal reasoning in general and as displayed in management commentary reports, is, however, a highly discretionary act. It is likely to start with a diagnosis phase which probably leads to the identification of one or more 'probable' generating factors of the event. The subsequent communicative phase usually comes down to a selection process in which the communicator finally makes a selection of one or more necessary conditions as 'the' explanation for an event or outcome (Buttny & Morris, 2001). As such, causal