Journal of Accounting Literature 36 (2016) 1–27

Contents lists available at ScienceDirect

Journal of Accounting Literature

journal homepage: www.elsevier.com/locate/acclit

Managing the risk of misleading financial metrics in annual reports: A first step towards providing assurance over management's discussion

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ARTICLE INFO

Article history:
Received 8 May 2016
Accepted 8 May 2016
Available online 11 May 2016

Keywords:
MD&A
Financial reporting transparency
Audit risk
Financial ratios

ABSTRACT

Recent public policy initiatives seek greater transparency in financial reporting through an honest, balanced and thorough management discussion of company performance in the annual report. Management's discussion invariably includes key performance indicators, such as financial ratios, relevant to external stakeholders. We model the impact of accounting estimates, assumptions, choices and errors on the risk of misleading financial ratios. This framework is illustrated through good and bad examples of financial reporting practices and by simulation of financial data of public companies. We provide a structured approach to inform policymakers, auditors and other stakeholders of the incremental financial reporting risk that accompanies current regulatory efforts.

1. Introduction

In the aftermath of the 2008 financial crisis, the Financial Accounting Standards Board (FASB), the Financial Reporting Council (FRC), the European Financial Reporting Advisory Group (EFRAG) and others have issued discussion papers and new rules to enhance financial reporting transparency

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http://dx.doi.org/10.1016/j.acclit.2016.05.001
0737-4607/

(e.g., EFRAG, 2012; FASB, 2012; FRC, 2009). Much of their focus is on management's discussion in the annual report to ensure that it is fair, balanced and thorough. Auditing regulators and professional bodies such as the International Auditing and Assurance Standards Board (IAASB), the Institute of Chartered Accountants of Scotland (ICAS), the Institute of Chartered Accountants in England and Wales (ICAEW), and the Center for Audit Quality (CAQ) have reacted to this development by exploring opportunities for auditors to expand their assurance role over the annual report.

Management's discussion often includes key performance indicators (KPIs) that managers believe are important to financial statement users. In particular, financial analysts view financial ratios as "extremely powerful tools" for assessing a company's prospects (Revsine, Collins, Johnson, & Mittelstaedt, 2012, 250). Examples of ratios are easy to find in the annual reports of public companies worldwide and include profitability, leverage and operating ratios. Since many of these KPIs are based on information contained in the audited financial statements, the CAQ, ICAS and ICAEW are exploring whether auditors should extend their assurance function over these metrics (CAQ, 2012; ICAS, 2013; ICAEW, 2013). However, non-linear relationships between audited account balances and financial ratios do not allow for a straightforward extension of the audit risk model to the risk of misleading KPIs. Even small and immaterial errors in account balances can lead to material errors in financial ratios. The ensuing risk, though long recognized, has not been formally modeled, and little guidance exists in the professional and academic literatures. This paper develops a framework for assessing financial reporting risk associated with financial ratios.

There are several reasons that financial ratios could be misleading. The most obvious causes are errors in an account balance that is included in the financial ratio. While previous research has considered only this source (Dutta & Graham, 1998), we argue that financial reporting risk also emanates from accounting estimates, assumptions and choices that affect the component account balances. Our argument is motivated by examples, both good and bad, of financial ratio disclosures and related management discussions. Some companies, such as Nordstrom and Union Pacific, compute key profitability ratios as if operating leases were capitalized.[1] The voluntary disclosure of these less favorable metrics may be driven by management's desire for a balanced discussion and the belief that KPIs based on GAAP measures can be misleading. On the other hand, some companies present favorable non-GAAP metrics that could create engagement risk (Chen, Krishnan, & Pevzner, 2012). In some well-publicized cases (e.g. Lehman), controversial accounting choices, estimates and assumptions were made to window-dress key financial ratios (Dutta, Caplan, & Lawson, 2010). In summary, the use of financial ratios in annual reports is pervasive and policymakers are considering changes to the auditor's role relative to such information. However, the potential effects of these changes on financial reporting risk and the auditor's evaluation of evidence require further investigation (Mock et al., 2013, 341). The analytical framework developed in this paper helps inform policymakers of the challenges auditors confront when providing assurance on MD&A.

The remainder of the paper is organized as follows. Section 2 discusses recent regulatory and professional developments and relevant academic research. In the following three sections we model three scenarios using examples of commonly-used leverage, profitability and liquidity ratios. In Section 3 we model the impact of an aggressive interpretation of GAAP on the numerator of a leverage ratio, and the effect on financial reporting risk. In Section 4, we model the effect of capitalizing operating leases on the denominator of a profitability ratio. Using data from 20 well-known companies we estimate the effect of capitalizing operating leases on ROA. In Section 5, we model the effect of accounting choices or errors that equally affect both the numerator and denominator of a liquidity ratio. We perform a simulation analysis on the Fortune 200 and find that the liquidity ratio is highly sensitive to small offsetting errors in the underlying account balances. In Section 6, we discuss how our results can be generalized to additional scenarios in which accounting errors, estimates and policy choices affect commonly-used financial ratios. Section 7 provides concluding remarks. In Appendix B we show that the framework developed in this paper applies to traditional audit settings, such as assessing the risk of misstating depreciation expense.

[1] The examples were obtained from the respective 2012 annual reports (Nordstrom Inc., 2012; Union Pacific Corporation, 2012).