ARTICLE IN PRESS

Advances in Accounting xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

Advances in Accounting

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

How investors value cash and cash flows when managers commit to providing earnings forecasts

Michael J Imhof[a,*], Scott E. Seavey[b]

[a] Wichita State University, United States
[b] Florida Atlantic University, United States

ARTICLE INFO

Keywords:
Management earnings forecasts
Voluntary disclosure
Value of cash
Agency costs

ABSTRACT

Theory considers voluntary disclosure to be an important mechanism for reducing information asymmetry in the corporate setting (Bertomeu, Beyer, & Dye, 2011). Prior research on corporate cash policy suggests that investors value cash holdings more when information asymmetry is low (e.g., Drobetz, Gruninger, & Hirschvogl, 2010). Given both streams of literature, we examine whether investors value cash and cash flows higher for firms that commit to providing management earnings forecasts, an important form of voluntary disclosure. In univariate analyses, we show that committed forecasting is negatively associated with widely accepted measures of information asymmetry. In multivariate tests, we document that committed forecasting is associated with a higher market value of cash, surplus cash and operating cash flows. Our multivariate results are robust to adjustments for endogeneity in managers' forecast decision, and to the inclusion of controls for alternative uses of cash, firm information quality, information demand and governance.

1. Introduction

Motivated by theory suggesting that voluntary disclosure reduces information asymmetries in the corporate setting, we investigate whether investors place a higher value on the cash holdings and cash flows of firms that commit to providing management earnings forecasts than the cash and cash flows of firms that do not commit to providing management earnings forecasts. We focus on the commitment to management earnings forecasts, which are forward-looking, because they are considered a good representation of a firm's voluntary disclosure policy (Beyer, Cohen, Lys, & Walther, 2010) and because committed voluntary disclosure is considered less biased or opportunistic than intermittent voluntary disclosure (Lang & Lundholm, 2000; Verrecchia, 2001).

Earnings forecasts are often bundled with earnings reports (Anilowski, Feng, & Skinner, 2007), and when issuing forecasts, managers commonly discuss how their firm's ongoing capital investments are expected to affect future earnings (Waymire, 1986; Hutton, Miller, & skinner 2003; Choi, Myers, Zang, & Ziebart, 2011).[1] Consequently, management earnings forecasts are likely to influence, among other things, how the market prices the firm's liquid assets, as cash and cash flows can be used to support or expand profitable investments. This view is supported by literature equating capital expenditures to internal sources of capital, where cash is considered the least costly form of financing (e.g., Myers & Majluf, 1984 Stiglitz & Weiss, 1981). In Appendix 2, we provide examples of earnings reports bundled with management earnings forecasts, to illustrate the type of information that generally accompanies forecasts.

We additionally motivate our study by research suggesting that corporate information asymmetries lead to agency conflicts between investors and managers (e.g., Fama & Jensen, 1985; Jensen & Meckling, 1976), and by literature suggesting that lower information asymmetries are associated with higher valuations of cash. For example, Drobetz et al. (2010) find that cash is valued less in firms for which information asymmetries between managers and shareholders are relatively high. Similarly, Dittmar and Mahrt-Smith (2007) document higher marginal values of cash holdings in firms with better corporate governance.

Our final sample includes 16,428 firm-year observations, and spans the years 1997 to 2010. To examine the relation between managers' commitment to providing earnings forecasts and the value of cash and cash flows, we model the natural log of market value as a function of forecast commitment, measures of cash, surplus cash and cash flows, and an interaction between forecast commitment and cash, surplus cash and cash flows. Theory highlights the potential endogeneity in

* Corresponding author at: School of Accountancy, 337 Clinton Hall, 1845 Fairmount St., Wichita, Kansas, United States.
E-mail address: michael.imhof@wichita.edu (M.J. Imhof).

[1] Imhof et al. (2016) link managerial earnings forecasts to discussions of firms' investments in 8-K filings and find that the 8-K reports of committed forecasters contain more frequent and detailed discussion of firm investments than the 8-Ks of non-committed forecasters.

https://doi.org/10.1016/j.adiac.2018.03.004
Received 11 January 2017; Received in revised form 8 March 2018; Accepted 16 March 2018
0882-6110/

Please cite this article as: Imhof, M.J., Advances in Accounting (2018), https://doi.org/10.1016/j.adiac.2018.03.004

managers' voluntary disclosure decisions (see Core, 2001; Healy & Palepu, 2001). Because there could be some underlying, uncontrolled-for, factor that motivates both how the market values a firm's cash and cash flows, and whether or not managers commit to forecasting, we use a Heckman selection procedure (Heckman, 1979), and two-stage least squares (2SLS) to mitigate the effects of endogeneity in our multivariate models (see Section 3). We additionally control for alternative uses of cash, information asymmetry, information demand, and firm governance.

Our results are as follows: First, we present univariate evidence that commitment to management earnings forecasts is negatively associated with common measures of information asymmetry, suggesting that managers may improve their firm's information environment through frequent forecasting. Second, in a multivariate setting, after controlling for endogeneity and other determinants of firm valuation and forecast commitment, we show that forecast commitment is associated with a higher market value of cash, surplus cash and operating cash flows. These results suggest a causal relation between commitment to management earnings forecasts and higher market value of liquid assets, and support theoretical predictions that voluntary disclosure may reduce investor information risk.

We contribute to two major streams of literature. First, we contribute to literature examining factors that affect the value of corporate cash holdings. Prior studies suggest that voluntary disclosure, in so much as it reduces information asymmetries between investors and managers, can lead to higher market values of cash (e.g., Dittmar & Mahrt-Smith, 2007; Drobetz et al., 2010). Our study complements and extends this line of research, as we examine a particular type of voluntary disclosure, management earnings forecasts, and relate forecast commitment to cash and cash flow values.

We additionally contribute to research that considers the antecedents and consequences of voluntary disclosure as being separate from those of mandatory disclosure.[2] While mandatory disclosures, such as 10-K reports, provide an information ‘floor’ in capital markets, managers may voluntarily disclose to improve investors' information sets beyond mandatory disclosure. However, disclosure theory predicts that only *committed* voluntary disclosure will be considered credible; managers committed to voluntary disclosure are likely to disclose good *and* bad news, rather than disclose opportunistically at the expense of external shareholders (Verrecchia, 2001; Brown, Hillegeist, & Lo 2004; Miller, 2009).[3] Our study directly tests this proposition, as we investigate the market's assessment of firm information risk in light of committed disclosure through forecasting.

Our results complement those reported by Huang and Zhang (2012), who document a positive relation between firm disclosure and the market value of corporate cash holdings. However, our study differs from their study in two important aspects. First, Huang and Zhang (2012) use Association for Investment Management and Research (AIMR) disclosure scores to examine the link between firm disclosure and the value of corporate cash holdings. These scores, which are based on financial analysts' rankings of U.S. firms' disclosure activities, capture both voluntary and mandatory disclosure. Furthermore, because they are derived from a survey of financial analysts, AIMR scores may be “tainted by unobservable bias in the analyst survey respondents” (Bens & Monohan, 2004). Our study focuses exclusively on *voluntary* disclosure through management earnings forecasts, an important distinction, as the information provided in voluntary disclosures should be incremental to the information provided in mandatory disclosures.[4] Additionally, our study examines a more recent period (1997–2010), and a more comprehensive sample of firms than Huang and Zhang (2012), whose sample period is dated 1996 and earlier.

The remainder of the paper is as follows. In the next section, we discuss relevant literature and develop testable hypotheses regarding the relation between commitment to management earnings forecasts and the value of corporate cash holdings and cash flows. In Section 3, we detail our sample construction and research design. In Section 4, we discuss our univariate and multivariate results and the robustness of our findings to several sensitivity tests. In Section 5, we conclude and offer directions for future research.

2. Relevant literature and hypotheses

2.1. Voluntary disclosure and firm information

Theory contends that voluntary disclosure may reduce information asymmetries in the corporate setting and effectively lower the adverse selection and moral hazard risks faced by external shareholders (Bertomeu, Beyer, & Dye, 2011; Diamond & Verrecchia, 1991; Easley & O'Hara, 2004; Kim & Verrecchia, 1994). Consequently, voluntary disclosure may improve shareholder monitoring (Bens & Monohan, 2004; Bushman & Smith, 2001), reduce managers' ability to manipulate financial reporting (Jo & Kim, 2007), and improve resource allocation (Imhof, Omer, & Seavey, 2016; Kanodia & Lee, 1998). Prior research links voluntary disclosure to greater analyst coverage and lower analyst forecast errors (e.g., Lang & Lundholm, 1996), increased stock liquidity (Welker, 1995) and lower cost of capital (e.g., Botosan, 1997; Francis, Nanda, & Olsson, 2008; Sengupta, 1998). Despite these findings, Beyer et al. (2010) argue that empirical disclosure studies often fail to distinguish between voluntary disclosure and mandatory disclosure in their research designs, even though theory considers voluntary disclosure complementary to mandatory disclosure (Ball, Jayaram, & Shivakumar, 2012; Dye, 1990). Studies able to separate the effects of voluntary disclosure from mandatory disclosure constitute the best test of disclosure theory (Beyer et al., 2010). Our study focuses on a popular form of voluntary disclosure, management earnings forecasts, which are distinct from mandatory disclosures.

2.2. Information and the value of corporate cash holdings

We focus on cash because the values investors place on liquid assets are likely to depend on information asymmetries between managers and shareholders. When information asymmetries are pronounced,

[2] A useful starting point to the literature on voluntary disclosure is Grossman and Hart (1983), Grossman (1981), Milgrom (1981) and Milgrom and Roberts (1986). These studies argue that adverse selection is not problematic, as firms will undertake full disclosure in equilibrium. Their rationale is that when firms are viewed to withhold information, investors (or consumers within the context of their models) will anticipate the worse, pushing the value of stocks downward. Subsequent literature challenges this view by pointing to the costs of disclosure (Darrough, 1993; Darrough & Stoughton, 1990; Feltham & Xie, 1992; Gigler, 1994; Newman & Sansing, 1993; Verrecchia, 1983; Wagenhofer, 1990). In the presence of proprietary costs, a lack of disclosure need not necessarily imply that a firm is concealing bad news. Consistent with this argument, prior literature has documented considerable variation in firm disclosure policy (e.g., Lang & Lundholm, 1996). Additionally, disclosure has been found to be lacking for firms facing intense product market competition and those in high litigation industries (Bamber & Cheon, 1998). More recent models allow for partial disclosure, focusing on the role of managerial discretion over what and when to disclose. Such discretion may give rise to strategic disclosure and/or “sanitation” of information about a firm's investments, where managers disclose only news that supports their goals (Brockman, Khurana, & Martin, 2008; Goto, Watanabe, & Xu, 2009; Shin, 2003).

[3] Though theory suggests that disclosure results in better dissemination of firm information, if managers have a choice, they are likely to disclose only good news. Because of career concerns, managers have strong incentive to withhold bad news (Hermalin & Weisbach, 2012; Kothari, Shu, & Wysocki, 2009). The result is selective disclosure, where managers attempt to bury or delay the release of bad news (Brockman et al., 2008; Goto et al., 2009; Shin, 2003). One exception to this argument is the case where managers reveal bad news quickly, to lessen the potential for litigation (see Baginski, Hassell, & Kimbrough, 2002; Kaznik & Lev, 1995; Skinner, 1994, 1997).

[4] Dye (1990) argues that mandatory disclosure should contain information that firms would not voluntarily disclose. Otherwise, accounting regulations mandating these disclosures are redundant, since the information is already provided voluntarily. Ball et al. (2012) provide empirical evidence that mandatory and voluntary disclosures are complements.