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Internal corporate governance and cash flow manipulation

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Abstract

Purpose – The authors examine whether internal corporate governance mechanisms are effective in curbing cash flow manipulation through real activities, misclassification, and timing.

Design/methodology/approach – The sample comprises of firms from an emerging market, India with data for years 2004 through 2015. The authors use the methodology given in Roychowdhury (2006).

Findings – The authors find that corporate boards in India play an active role in curbing cash flow manipulation through real activities but fail to control cash flow manipulation through misclassification and timing.

Practical implications – The study suggests that corporate boards should pay more attention to the reported cash flow numbers. Regulators can reduce the opportunities available for cash flow misclassification by fixing relevant accounting and governance norms. Auditors can also help by critically focusing on the cash flow classifications presented by management.

Originality/value – This study, to the authors' knowledge, is the first study that talks about the role of internal governance in a trade-off between different cash flow manipulation techniques.

Keywords Board of directors, Cash flow manipulation, Corporate governance, Real activities manipulation

Paper type Research paper

1. Introduction

Prior studies find that corporate governance plays an important role in controlling earnings management through accruals (Klein, 2002; Peasnell *et al.*, 2005) and real activities (Cheng *et al.*, 2016), and cash flow manipulation (Nagar and Raithatha, 2016). Several studies also talk about the trade-off between two earnings management strategies, i.e. real activities management and accrual management (Badertscher, 2011; Cohen *et al.*, 2008; Cohen and Zarowin, 2010; Zang, 2012). However, the literature that focuses on the role of internal corporate governance on trade-offs between different operating cash flow manipulation techniques is non-existent. In this study, we focus on the effectiveness of the board of directors and examine whether board-level governance is effective in curbing this manipulation. We focus on the trade-off between two techniques of cash flow manipulation – (a) classification and timing and (b) real activities manipulation.

Operating cash flows can be inflated through a reduction in discretionary expenditure (e.g. research and development, selling, general, and administrative). This technique is also known as real activities manipulation. Managers can also resort to operating cash flow manipulation through misclassification of items in the cash flow statement and timing of receipts and payments (Lee, 2012). Since the number of firms and analysts who are issuing cash flow forecasts has increased over time (DeFond and Hung, 2003, 2007; Wasley and Wu, 2006), managers have incentives to meet or beat these forecasts by manipulating the cash

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flow numbers. Thus, it is important to know whether a firm's internal governance is effective in curbing such opportunistic behaviour.

Our setting is an emerging market, India. The Indian economy provides us a unique setting where there is a lot of heterogeneity amongst the firms. Most of the large firms are affiliated to business groups and are being run by the family members of the founders (known as promoters). Hence, controlling shareholders are likely to have a large say in the decision-making within such firms. However, within such family-controlled firms, there are also several firms managed professionally by outsiders. Agency costs in these family firms arise at both levels, first between shareholders and managers (Type-I) and then between majority and minority shareholders (Type-II).

We propose that effective internal governance mechanisms, proxied by the effectiveness of the board of directors, are likely to curb cash flow manipulation through real activities manipulation due to a likelihood of adverse impact on future firm performance (Cohen and Zarowin, 2010; Roychowdhury, 2006). However, these mechanisms are unlikely to be effective in curbing cash flow manipulation through classification and timing as such manipulations are tough to detect (see McVay, 2006; Nelson *et al.*, 2002). This study, to our knowledge, is the first study that talks about the role of internal governance in a trade-off between different cash flow manipulation techniques.

We use several proxies for internal governance mechanisms. Specifically, we use board characteristics like board size, board independence, board attendance, outside chairpersonships, and directorships of board members, presence of CEO duality as measures of internal governance mechanisms. We find that internal governance constrains cash flow manipulation through real activities manipulation, but it is ineffective in curbing cash flow manipulation through classification and timing. We also look at whether the effect of governance is similar in the presence of different managerial motives. We find that governance is ineffective when firms have incentives to meet or just beat cash flow benchmarks, are in financial distress, are complex, or need external financing. Moreover, we also find that powerful CEOs (measured through CEO duality) are less likely to resort to any form of cash flow manipulation. Our findings thus contribute to the literature on earnings management, cash flow manipulation, and corporate governance by showing that managers' trade-off between two cash flow manipulation techniques is a function of internal corporate governance.

Our study has implications for India as well as other emerging economies where regulatory regime is relatively weaker. First, since board of directors is entrusted with the monitoring and supervisory role, they are supposed to be well equipped to detect accounting manipulations. Our study helps them in understanding the tradeoffs involved in such manipulations with a focus on operating cash flows. Second, we contribute to the policy making and provide feedback to the regulatory authorities and standard setters. The relevant accounting standards need to be reframed so as to minimize the opportunities available for cash flow misclassifications. Finally, auditors need to become more proactive in detecting and publicizing such cash flow related manipulations.

The next section summarizes related research and develops our hypotheses. Section three describes our sample, followed by a section on the research design. In section five, we discuss our results, followed by a separate section on robustness checks. We conclude in the last section.

2. Literature review and hypothesis development

Earnings and cash flow management has been one of the widely discussed topics in the field of accounting. Prior studies have largely focused on two types of earnings management: accruals and real activities. Accrual-based earnings management is about choices related to accounting policies like choosing a depreciation method or creating provisions for doubtful accounts. Accrual-based earnings management can either inflate or deflate earnings but does not lead to any change in underlying transactions. Further, it does not affect a firm's cash flows.

Real activities management, on the other hand, is carried out by real transactions, like overproduction, reduction of research and development expenditure, and cash discounts (Roychowdhury, 2006). Unlike accrual-based earnings management, real activities management affects a firm's cash flows. For example, when discretionary expenses are reduced, earnings, as well as cash flows, increase. Managers' preference for real activities manipulation has been well documented in the literature. Graham *et al.* (2005), in a survey, report that managers prefer real activities management over accrual-based earnings management since it allows them to meet or beat earnings benchmarks, and in turn, helps them in increasing stock prices. In another work, Bhojraj *et al.* (2009) document that firms get short term benefits of the stock price increase by indulging in real earnings management (cutting down discretionary expenses) along with accrual-based earnings management. Baber *et al.* (1991) report that managers consider the impact on current earnings while spending on R&D, unlike capital spending, which is likely to be amortized over a period. Real activities management also allows managers to escape from scrutiny (Cohen and Zarowin, 2010). These short-term benefits may motivate managers to resort to real activities manipulation.

However, several studies point out the long-term harmful effects of real activities manipulation. When managers try to meet the market expectations by manipulating numbers, they end up compromising on operating decisions, which in turn destroys the future firm value (Jensen, 2005). For example, managers are likely to forgo projects with positive net present value if it is likely to result in reporting earnings lower than the forecasted earnings (Graham *et al.*, 2005). Bhojraj *et al.* (2009) suggest that indulging in real activities management may benefit the firm in the short run, but it is harmful in the long run. Similarly, Vorst (2016) documents that a reduction in future return on assets and cash flow from operations is associated with the reversal of earlier discretionary spending cuts. Finally, Ge and Kim (2014) find that real activities manipulation causes credit risk to increase and thus, impairs credit ratings.

Few prior studies have documented trade-offs between accrual earnings management and real activities manipulation. Zang (2012) documents that managers trade-off between accrual-based management and real activities management based on their relative costs. Similarly, Cohen *et al.* (2008) find that accrual-based earnings manipulation increased until SOX was passed in 2002 and declined thereafter. However, real activities management increased post-2002.

We take this existing literature on trade-offs between accounting manipulation techniques forward and focus on cash flow manipulation through (a) classification and timing, and (b) real activities manipulation. We make a firm's internal corporate governance the pivot while examining our key question.

While real activities manipulation can help managers in inflating reported operating cash flows, these can also be manipulated using other techniques. Lee (2012) shows that managers misclassify items in the cash flow statement in order to inflate operating cash flows. Further, managers accelerate collections and delay payments at the end of a financial year with the same motive. Lee (2012) also finds that firms are more likely to manage upward operating cash flows when they are in financial distress or have long-term credit rating near the investment/non-investment grade cut-off.

Arguably, the importance of information on operating cash flows has increased considerably over the years, which is likely to motivate managers to manipulate these. A lot of firms and analysts are issuing cash flow forecasts now (DeFond and Hung, 2003; Wasley and Wu, 2006; DeFond and Hung, 2007; Call, 2007). Managers may be interested in meeting or beating such forecasts as stock prices react positively to cash flow surprises (DeFond and Hung, 2003; Zhang, 2007; Brown *et al.*, 2013). Operating cash flows are the primary source of sustainable cash flows (Mulford and Comiskey, 2005), and are likely to affect firm valuation (Charitou and Ketz, 1990). In addition, debt covenants and executive compensation may be linked with these cash flows, motivating managers to

indulge in creative cash flow reporting (Mulford and Comiskey, 2005; Frankel *et al.*, 2014). Yang and Kim (2020) find that overconfident managers manipulate operating cash flows after initial overinvestments. Mangers also resort to tax planning and report higher operating cash flows following the presence of analysts' cash flow forecasts (Ayers *et al.*, 2018). Focusing on resulting consequences of manipulation, Alfonso *et al.* (2018) find that the stock market reacts negatively to cash flow restatements.

Our empirical setting is India, one of the largest emerging market economies that follows a common law legal regime, like the United States of America (US). The role of internal corporate governance is more critical in emerging markets like India where the enforcement of rules has not been strong (Khanna and Palepu, 2004). Post-economic liberalization of India in 1991, as more companies desired to tap the external sources of finance, the focus on effective corporate governance increased (Sarkar and Sarkar, 2012; Afsharipour, 2009). This resulted in several corporate governance reforms and the implementation of Clause 49 of the listing agreement (Saez, 2014) and the Companies Act (2013), which emphasize on the internal governance in listed firms.

We look at the board structure as a proxy for internal governance. Previous corporate governance literature mainly focuses on boards' impact on economic consequences like firm performance (Bhagat and Black, 2002; Fich and Shivdasani, 2007; Brown and Caylor, 2006; Coles *et al.*, 2008), executive pay-performance relationship (Werner *et al.*, 2005) and earnings quality (Wang, 2006; Pham *et al.*, 2019; Chatterjee, 2020). The role of a board in controlling real activates manipulation is largely undiscussed. The objective of board structure and good governance is to facilitate transparent and high-quality reporting to the shareholders. We determine the monitoring/advisory ability of the board through four different variables that have been previously used in the literature: board size (Ahmed and Duellman, 2007; Ahmed and Henry, 2012), board independence (Beekes *et al.*, 2004; Garcia Lara *et al.*, 2009; Ahmed and Duellman, 2007; Ahmed and Henry, 2012), the average number of meetings attended by the board members (Garcia Lara *et al.*, 2009) and outside chairpersonships/directorships of the board members (Fich and Shivdasani, 2007).

A large board allows directors from different functional backgrounds to be together, which increases the monitoring intensity (Sarkar and Sarkar, 2009; Singh and Gaur, 2009). Moreover, a large board also allows for specialization within the board because of better allocation of duties and expertise, which further improves the monitoring ability of the board (Ahmed and Henry, 2012; Lim, 2011; Ahmed and Duellman, 2007). The monitoring intensity of the board also increases with an increase in the proportion of independent directors. Hermalin and Weisbach (1998) have shown that the presence of outside directors is positively related to the CEO removal decision. Next, a high average number of board meetings attended by directors shows two aspects of board functioning. First, it shows that the directors are responsible for their duties, which implies that they take their role seriously (Garcia Lara *et al.*, 2009; Lipton and Lorsch, 1992). Second, it shows that since the strategic decisions are taken after the deliberation of all the board members, management's rent-seeking and opportunistic behaviour could be easily detected. This, in turn, increases the monitoring ability of the board (Jackling and Johl, 2009). Several studies have documented that outside directorships and chairpersonships bring resources and experience required to contribute effectively to a board's decision-making processes. Sarkar and Sarkar (2009) provide support to the resource dependency theory and find that, in India, multiple directorships (specifically, of independent directors) positively affect firm value, mainly because they have better networks and linkages with the outside environment (Booth and Deli, 1996; Mizruchi and Stearns, 1994; Pfeffer, 1972, Jackling and Johl, 2009).

Thus, the increase in board size, the proportion of independent directors on a board, directors' attendance, and outside directorships and chairpersonships are likely to increase the monitoring ability of the board. These help in safeguarding the interest of shareholders by advising the management on key business decisions, ensuring compliance with the

regulatory norms, and conveying reliable information to the market through timely disclosure of salient information (Balasubramaniam *et al.*, 2010; Hillman *et al.*, 2000). The importance of internal governance through a board is arguably even more relevant in an emerging market context (like India) where institutional voids result in investor protection being relatively lower, legal structure weaker, and secondary agency conflicts higher due to a prevalence of family businesses and business groups. Considering these arguments, we expect that strong internal governance through a board of directors would curb real activities manipulation since it can be harmful to the firm in the long run.

In a nutshell, we hypothesize that firms with a better quality of board are likely to exhibit lower cash flow manipulation through real activities. However, we argue that managers who are constrained to engage cash flow manipulation through real activities will resort to cash flow manipulation through other techniques viz. classification and timing. Our premise is based on two arguments. First, classification shifting is less likely to be detected easily (see McVay, 2006; Nelson *et al.*, 2002). Second, the opportunistic timing of cash flows is tough to detect as well as question. For example, delay in year-end payments to suppliers can be attributed to a firm's temporary financial difficulties. Similarly, quick collections can be attributed to customers' financial well-being. These can also be done in a tacit understanding with a supplier or a customer. To empirically examine our proposition, we set the following hypothesis.

H1. Internal governance mechanisms curb cash flow manipulation through real activities but not through classification and timing.

In our main hypothesis, we argue that internal governance mechanisms will curb the cash flow manipulation using real activities manipulation, but these will not be able to bring down cash flow manipulation through classification and timing. However, the effectiveness of internal governance will depend upon managerial motives. Using the findings from the prior studies regarding incentives of real earnings management, we develop several arguments for managerial motives that may influence the effectiveness of internal governance in curbing cash flow manipulation.

2.1 Meeting or beating earnings benchmarks

Prior studies have documented that big, reputed, well-governed, growth-oriented and firms with high institutional ownership or litigation risks will have more incentives to meet or beat analysts' forecasts (see Crutchley *et al.*, 1999; Matsumoto, 2002; Baginski *et al.*, 2004; Ajinkya *et al.*, 2005; Baik and Jiang, 2006). There are capital market benefits like higher stock returns (Bartov *et al.*, 2002), specifically when they beat the expectations consistently (Kasznik and McNichols, 2002). Thus, managers are more likely to indulge in cash flow manipulation by both the means – (a) real activities manipulation and (b) classification and timing. In order to support our main findings, consistent with the previous studies, we focus on a sub-sample of firms who meet or just beat earnings benchmarks (see, for example, Burgstahler and Dichev, 1997; Degeorge *et al.*, 1999; Cheng *et al.*, 2016). Such firms are more likely to indulge in manipulation and can be considered as "suspect" firms. We do not expect internal governance to be effective in curbing managerial motives for such "suspect" firms. We set our second hypothesis as under.

H2. Internal governance mechanisms will not be effective in curbing cash flow manipulation either through real activities or through classification and timing for suspect firms.

2.2 Firm complexity (R&D intensity)

Prior studies document that managers use R&D budgets to adjust earnings in order to avoid a decrease in earnings (Bushee, 1998), and negative surprises (Bange and De Bondt, 1998).

R&D is an important discretionary tool used by firms to achieve short term earnings targets (Graham *et al.*, 2005). In their survey study, Graham *et al.* (2005) report that over 80% of the financial executives, who participated in their survey, agreed that they would decrease R&D expenses to achieve the earning targets. On similar grounds, Grinyer *et al.* (1998) and Demirag (1995a, 1995b) report similar R&D related behaviour by the top management. Cheng *et al.* (2016) report that the effectiveness of a firm's internal governance to curb real activities manipulation is affected by the firm's complexity (proxied by R&D intensity). We examine whether the effectiveness of internal governance in constraining cash flow manipulation is indeed weaker for firms with high R&D intensity.

H3. Internal governance mechanisms will not be effective in curbing cash flow manipulation either through real activities or through classification and timing for R&D intensive firms.

2.3 Financial distress

When firms are in financial distress, managers face the risk of pay cuts, reputation loss, and job loss (Liberty and Zimmerman, 1986; Gilson, 1989). In such a scenario, they may resort to earnings and cash flow manipulation. Financially distressed firms in China indulge in income-increasing accruals management in order to avoid higher monitoring by Government and delisting (Chen *et al.*, 2010). In another study, Rosner (2003) shows that bankrupt firms, which are not seen to be in distress *ex ante*, resort to income-increasing earnings manipulation. Several other studies document that firms in distress are more likely to resort to earnings/cash flow manipulation (see, for example, Graham *et al.*, 2005; DeFond and Hung, 2003; Lee, 2012). We check the impact of financial distress through the following hypothesis.

H4. When firms are in financial distress, internal governance mechanisms will not be effective in curbing cash flow manipulation either through real activities or through classification and timing.

2.4 Public issue

Prior studies suggest that managers manage earnings when they want to raise funds from the market (Beneish, 1999; Erickson and Wang, 1999; Healy and Wahlen, 1999; Shivakumar, 2000). Teoh *et al.* (1998) and Rangan (1998) find that managers manage earnings at the time of equity issues to boost their stock prices. Besides, earnings management also helps firms in lowering the cost of capital (Hirshleifer *et al.*, 2004), obtaining financing more easily and with better terms (Doukas *et al.*, 2005; Dechow *et al.*, 1996; Linck *et al.*, 2013). Hence, we hypothesize:

H5. Internal governance mechanisms will not be effective in curbing cash flow manipulation either through real activities or through classification and timing when firms raise external financing.

3. Data and sample

We use data from the Centre for Monitoring Indian Economy's (CMIE) Prowess database. Prowess is the most comprehensive database of accounting and financial information drawn from the annual reports of Indian companies, and has been used in several studies (e.g. Khanna and Palepu, 2000; Gopalan *et al.*, 2007). Our sample period is 2004–2015. We end our sample period in 2015 because India implemented new sets of Indian Accounting Standards (Ind AS from the year 2016 onwards in a phased manner [1]. This is likely to have drastically affected firm performance [2], accounting quality post-IFRS adoption (Bansal, 2022), and opportunities to misclassify cash flows (Baik *et al.*, 2016; Gordon *et al.*, 2017) [3].