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ScienceDirect
Journal of Accounting and Economics 42 (2006) 335–370
JOURNAL OF Accounting & Economics
www.elsevier.com/locate/jae

Earnings management through real activities manipulation ☆

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Abstract

I find evidence consistent with managers manipulating real activities to avoid reporting annual losses. Specifically, I find evidence suggesting price discounts to temporarily increase sales, overproduction to report lower cost of goods sold, and reduction of discretionary expenditures to improve reported margins. Cross-sectional analysis reveals that these activities are less prevalent in the presence of sophisticated investors. Other factors that influence real activities manipulation include industry membership, the stock of inventories and receivables, and incentives to meet zero earnings. There is also some, though less robust, evidence of real activities manipulation to meet annual analyst forecasts.

JEL classification: M4; M41; M43; M1

Keywords: Capital markets; Accounting choice; Earnings manipulation

☆This paper is based on my dissertation at the University of Rochester. I am grateful for the guidance I have received from my thesis advisor, Ross L. Watts and from my thesis committee members, Jerold Zimmerman and Andrew Leone. This paper has benefited from the comments of the editor, Doug Skinner (the editor), and Joseph Piotroski (the referee). I have also received helpful comments and suggestions from S.P. Kothari, Joanna Wu, Charles Wasley, Jim Brickley, Ludger Hentschel, Liz Demers, Shailendra Pandit, Joe Weber, and Hema Roychowdhury. I am grateful to the workshop participants at University of Michigan, Duke University, University of Pennsylvania, University of Chicago, University of Michigan, MIT, Harvard University, Columbia University, Northwestern University, Emory University and Yale University. All errors in the paper are mine.
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0165-4101/$ - see front matter
doi:10.1016/j.jacceco.2006.01.002

1. Introduction

There is substantial evidence that executives engage in earnings management.[1] One means of managing earnings is by manipulation of accruals with no direct cash flow consequences, hereafter referred to as accrual manipulation. Examples include under-provisioning for bad debt expenses and delaying asset write-offs. Managers also have incentives to manipulate real activities during the year to meet certain earnings targets. Real activities manipulation affects cash flows and in some cases, accruals. Much of the current research on earnings management focuses on detecting abnormal accruals. Studies that directly examine earnings management through real activities have concentrated mostly on investment activities, such as reductions in expenditures on research and development.[2]

My paper contributes to the literature on earnings management by presenting evidence on the management of *operational* activities, which has received little attention to date. Real activities manipulation is defined as management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds. The first objective of this paper is to develop empirical methods to detect real activities manipulation. I examine cash flow from operations (CFO), production costs, and discretionary expenses, variables that should capture the effect of real operations better than accruals. Next, I use these measures to detect real activities manipulation around the zero earnings threshold. I find evidence consistent with firms trying to avoid losses by offering price discounts to temporarily increase sales, engaging in overproduction to lower cost of goods sold (COGS), and reducing discretionary expenditures aggressively to improve margins.

There is predictable cross-sectional variation in real activities manipulation to avoid losses. In particular, the presence of sophisticated investors restricts the extent of real activities manipulation. This suggests that even though these activities enable managers to meet short-run earnings targets, they are unlikely to increase long-run firm value. Industry membership, the stock of inventories and receivables, growth opportunities, and the presence of debt are other factors that affect variation in real activities manipulation.

I develop several robustness tests to investigate if the evidence of abnormal real activities among firm-years reporting small annual profits reflect (a) earnings management to avoid losses, or (b) optimal responses to prevailing economic circumstances. The collective evidence from these robustness tests seems more consistent with the earnings management explanation. Finally, I document some evidence of real activities manipulation to meet/beat annual analyst forecasts.

Since Hayn (1995) and Burgstahler and Dichev (1997) found evidence of the discontinuity in frequency of firm-years around zero earnings, academics have had limited success in documenting further evidence of earnings management to avoid losses.[3] For example, Dechow et al. (2003) fail to find evidence that firms reporting small profits

[1] Healy (1985), Guidry et al. (1999). Defond and Jiambalvo (1994), Teoh et al. (1998a, b) and Kasznik (1999) are examples of studies that provide evidence on earnings management. Kothari (2001), Fields et al. (2001) and Healy and Wahlen (1999) provide a survey of the literature on earnings management and accrual manipulation.

[2] See Baber et al. (1991), Dechow and Sloan (1991), Bartov (1993), Bushee (1998), Bens et al. (2002) and Bens et al. (2003). These are discussed in greater detail in Section 2.2.

[3] The discontinuity in the distribution of firm-year frequency at zero earnings has since been corroborated by Degeorge et al. (1999), Burgstahler and Eames (1999), Dechow et al. (2003) and Beaver et al. (2003 and 2004).