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Quarterly Earnings Patterns and Earnings Management*

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1. Introduction

Empirical evidence suggests that firms manage earnings to avoid reporting losses or earnings decreases or to meet analysts' expectations.[1] If firms manage earnings to meet or beat a target number, adjustments to earnings are likely to be made when the excess or shortfall from the target becomes known. Hence, the timing of manipulation is likely to be a critical distinguishing feature that could provide a means to detect such target management behavior. Consistent with this view, investment experts caution investors to watch out for late-year surges in revenues and earnings, which they regard as telltale signs of earnings manipulation. Articles in the business press dating back to the 1990s cite cases of technology companies reporting disproportionate increases in revenues and earnings in the fourth quarter.[2] In this paper, we exploit the timing constraint on a firm's ability to manage to a target and examine whether the pattern of quarterly earnings can provide an indication of potential earnings management.

Although anecdotal evidence of late-year adjustments to earnings is ample, large-sample empirical evidence of the prevalence of this phenomenon and whether it in fact reflects earnings management is relatively sparse. Dhaliwal, Gleason, and Mills (2004) find that firms engage in "last chance earnings management" by adjusting their effective tax rates from the third to the fourth quarters to meet or just beat annual earnings targets. In relation to target management, Jacob and Jorgensen (2007) and Kerstein and Rai (2007) examine distributions of earnings measured over varying cumulation periods, and find evidence consistent with

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