

BIAS AND MEASUREMENT ERROR IN DISCRETIONARY ACCRUAL MODELS

**Glen A. Hansen
Penn State University**

Abstract

This paper examines bias and measurement error in discretionary accrual models. Discretionary accrual models are expectations models for total accruals and measure ‘unusual’ accruals, but not necessarily discretionary accruals. In earnings management studies using these models there is measurement error and potentially bias if ‘unusual accruals’ occur because of transactions or events other than the hypothesized managerial behavior. Many earnings management studies focus on managerial discretion over financial reporting. For these studies, structural changes such as acquisitions, discontinued operations, capital expenditures and divestments constitute real business changes and not simply discretion over financial reporting. Therefore, ‘unusual accruals’ attributable to these structural changes represent measurement error in discretionary accrual estimates in studies that examine discretion over financial reporting. I find that structural changes are associated with both the direction and magnitude of discretionary accrual estimates obtained from commonly used models. I also find that the measurement error associated with these structural changes is correlated with the level of earnings. Since the level of earnings is often used by researcher’s to partition earnings management incentives (or is correlated with the partitioning variable), this suggests that many earnings management studies are biased.