Alternative Earnings Management Techniques: What Audit Committees and Internal Auditors Should Know

Mike Braswell and Roger B. Daniels

INTRODUCTION

Enhancement of audit committee (AC) responsibilities and the oversight of the public accounting profession have been made over the past decade to improve the transparency of public companies’ financial disclosures (Sarbanes-Oxley Act of 2002 [SOX 2002]). Although SOX 2002 appears to have curtailed management’s use of discretionary accounting choices (generally accepted accounting principles [GAAP]-based earnings management) to achieve earnings targets, pressure to satisfy Wall Street remains evident as companies disproportionately report earnings that just meet or exceed these targets (Brown, 2001; Zang, 2012). The Securities and Exchange Commission (SEC) often cites the temptation to meet or exceed analysts’ earnings per share (EPS) estimates as motivation for management to manipulate reported earnings, which companies continue to do.¹

Regulators’ efforts to deter GAAP-based earnings management following the implementation of SOX 2002 appear to be effective, but this trend reflects management’s change in style rather than a change in attitude. Managers have exhibited a growing willingness to adopt real earnings management...
REM techniques to influence reported earnings that often fall under the radar of the independent auditor. The temporary reporting benefits of employing REM have the side effect of hampering investors’ assessment of firm value and the weakening of the AC’s ability to provide reliable information to the board of directors. These practices primarily include production-level manipulation, deferral of discretionary expenses, delay in investment projects, sales of profitable assets, and reduction in sales prices and credit terms.

Research on the REM phenomenon suggests that the activity is widespread. A recent survey revealed that 78% of corporate managers admit to making operational decisions to influence short-term earnings at the expense of long-term economic performance (Graham, Harvey, & Rajgopal, 2005). REM has also been observed to be substitutes for GAAP-based earnings management following the implementation of SOX 2002, undermining the spirit of the legislation (Cohen, Dey, & Lys, 2008; Zang, 2012). Executives are aware of the stock price implications of missing analysts’ forecasted EPS, and would prefer to gain credibility by reporting stable, predictable earnings. Management’s affinity for making operating decisions that enable the company to meet or exceed analysts’ EPS estimates to maintain overvalued stock prices has been well documented, even though doing so may compromise subsequent performance (Badertscher, 2011; Bhojraj, Hribar, Picconi, & McInnis, 2009; Cohen et al., 2008). Although external auditors are investors’ first line of defense in detecting materially misleading financial statements, auditors are not responsible for opportunistic investment or operational transactions that comply with GAAP, but create a short-term picture of financial success while compromising long-term financial performance. The AC and the IA are both key in ensuring that the company’s internal control structure is operating effectively so that the financial reporting system yields transparent information that can be relied upon by the AC to fulfill its oversight obligations on behalf of shareholders (Institute of Internal Auditors [IIA], 2015; SOX 2002).

**REAL EARNINGS MANAGEMENT TECHNIQUES**

A variety of REM techniques that management may use to influence current period earnings are described in Exhibit 1. Management’s adoption of specific REM techniques vary across companies and often reflect the unique nature of the company’s operating environment. For example, manufacturing executives may decide to increase production toward the latter stages of the accounting period, once forecasted earnings appear to fall short of expectations. The additional inventory units result in less overhead per unit and a reduction of costs-of-goods-sold expense. Although reported earnings are enhanced, the excess inventory will cause companies to eventually incur unnecessary holding costs and face liquidity issues since the inventory may not be sold in the near future.

Another approach to REM involves deferring discretionary expenditures such as research and development or general and administrative expenses to the following accounting period. These expenditures were not likely to have generated revenue during the current accounting period anyway, but future revenue generation may be delayed, which could compromise competitiveness. From a financial statement perspective, the deferral of necessary expenditures will eventually lead to overstated expenses in the following accounting period making it difficult for investors and ACs to assess management’s performance. The deferral of research-and-development expenditures may also prove costly by prolonging the creation of income-producing assets, resulting in loss of market share and, ultimately, compromising organizational solvency.

Investment decisions may also be used as REM tools. By delaying capital projects, there is a deferral of related expenses, including depreciation on fixed assets that would otherwise have been placed into service before the end of the accounting period. Delaying such projects may result in the opportunity costs of forgoing profitable projects during the current period and losing market share that could be detrimental to long-term performance. Investors may be tempted to acquire company stock based on enhanced, current-period earnings, while unknowingly exposing themselves to weaker, long-term stock performance.

A more desperate approach to enhancing earnings involves recording gains from selling profitable operating assets.
toward the end of the accounting periods that would have otherwise been used to generate future revenue. By forgoing future revenue generation, long-term shareholder value is sacrificed for supporting current stock price. Investors are unlikely to know the purpose of such transactions and therefore unable to make the optimal investment decisions. The risk assessment efforts of audit committees could be compromised if management’s motivation for selling such assets affects the company’s ability to compete and remain solvent.

Another approach involves making sales price reductions to customers in an effort to expedite revenue recognition that would have normally occurred during the following accounting period, if at all. Although such efforts may help management achieve analysts’ EPS estimates, investors with longer-term investment horizons may misprice stock prices based on the mistaken presumption that the current period bump in sales revenue will persist. A related phenomenon includes the extension of lax credit terms to increase sales despite the added risk of future write-offs of delinquent receivables.

**RESEARCH ON REAL EARNINGS MANAGEMENT**

Academic research documenting a variety of settings in which REM techniques have been used to achieve reporting benchmarks is summarized in Exhibit 2. One example of the opportunistic use of REM and the two-period effect it has on financial statements is apparent during equity issuances. When companies conduct seasoned

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### Exhibit 1

**Examples of Real Earnings Management Techniques**

<table>
<thead>
<tr>
<th>Real Earnings Management Methods</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormally high production of inventory (Roychowdhury, 2006)</td>
<td>Excess production activity before the fiscal year end allows overhead costs to be allocated over more units, resulting in lower cost of goods sold and higher EPS.</td>
</tr>
<tr>
<td>Deferred discretionary expenses (advertising and R&amp;D; maintenance expenses; general and administrative) (Roychowdhury, 2006)</td>
<td>Deferring discretionary expenses to future accounting periods can reduce expenses and increase EPS and potentially create opportunity costs by delaying the establishment of consumer market share.</td>
</tr>
<tr>
<td>Delay investment projects (Graham et al., 2005)</td>
<td>Avoid related expenses, including supplies and depreciation by delaying previously scheduled investment projects until after fiscal year end.</td>
</tr>
<tr>
<td>Stock repurchases (Hribar et al., 2006)</td>
<td>Management has the ability to increase EPS and consequently increase stock prices by repurchasing company stock from the open market between reporting periods.</td>
</tr>
<tr>
<td>Sales of profitable assets (Herrmann et al., 2003)</td>
<td>Recording gains from the sale of operating assets in order to enhance earnings.</td>
</tr>
<tr>
<td>Sales price reductions and flexible credit terms (Jackson &amp; Wilcox, 2000)</td>
<td>Unplanned price discounts on sales that result in forgone profits; lenient credit terms to increase sales at the expense of sales that would have occurred during the subsequent period.</td>
</tr>
</tbody>
</table>
equity offerings, REM activities are used to inflate stock prices during the period preceding the issuance by reporting favorable earnings. During the second reporting period, the negative earnings impact of the decision to defer expenses eventually surfaces and stock prices decline (Cohen et al., 2008). The sale of fixed assets and marketable securities, as well as the abnormal amount of shares repurchased by companies has been instrumental in helping firms achieve management’s prior earnings forecasts and maintain credibility with the market (Herrmann, Inou, & Thomas, 2003; Hribar, Jenkins, & Johnson, 2006).

Managers also appear to use sales discounts toward the end of the accounting period to maintain revenue growth and achieve earnings expectations, despite financial statement users being unaware of forgone revenues during the subsequent reporting periods (Jackson & Wilcox, 2000; Zang, 2012).

Despite the prevailing theory that the use of REM is opportunistic, and that it ultimately compromises long-term performance, the findings documented in Gunny (2010) suggest the opposite may be true. Gunny (2010) examines a sample of companies that just meet or beat analysts’ forecasted EPS and documents that such firms rely on an array of REM techniques, including reduced operating expenses and sales prices, as well as overproduction of inventory to minimize cost of goods sold. In contrast to related research, Gunny (2010) documents improved future financial performance of these companies, and concludes that in some circumstances REM is not necessarily an undesirable activity.

**COMPANY AND GOVERNANCE CHARACTERISTICS ASSOCIATED WITH REM**

ACs and IA may be able improve their monitoring efforts by identifying settings in which management may be more likely to engage in REM activities. Exhibit 3 provides company-level characteristics that are associated with REM. It is not at all surprising that manufacturing companies and those with relatively large net operating assets are more inclined to use their production capabilities to spread overhead costs over unusually high inventory levels in order to minimize cost-of-goods-sold expenses (Cohen & Zarowin, 2010; Roychowdhury, 2006).

Some industries, such as pharmaceutical, biotech, computers and electronics, maintain high degrees of litigation risk and are more likely to turn to REM than accrual-based earnings management (Cohen & Zarowin, 2010). Companies’ ownership structures also appear to have a role in management’s willingness to rely on REM to achieve earnings benchmarks and enhance short-term share value. Relatively higher degrees of institutional ownership may deter management’s use of REM, suggesting that institutional investors are more concerned with long-term stock performance rather than the short-term benefits provided by REM (Roychowdhury, 2006).

A company’s specific financial characteristics may also provide insight to ACs and IA about the likelihood that management relies on REM to achieve earnings benchmarks. Companies with high levels of debt are associated with management’s tendency to turn to REM prior to reporting earnings (Herrmann et al., 2003; Roychowdhury, 2006).

By remaining cognizant of the possibility that management would attempt to use REM to enhance performance and minimize the relative size of debt levels and disguise risk, ACs and IA can more effectively fulfill risk assessment obligations. It also appears that the desire to maintain higher stock prices that results from a company’s financial health and large consumer market share prompt management to report favorable earnings, even if it requires REM. Companies that have relatively low marginal tax rates and lack the flexibility in accrual-based accounting choices are also more likely to turn to REM since the tax implications of doing so are minimal and the ability to apply GAAP in an opportunistic manner is unavailable (Zang, 2012).

Exhibit 4 identifies governance attributes at both board of directors and audit committee levels that have been found to be associated with REM. The reliance on REM seems to be more common when AC members hold directorships on other companies’ boards and when the AC meets infrequently, suggesting that more time and attention should be spent by ACs and other directors on performing their oversight duties if they seek to deter REM (Garva, 2015; Sun, Lan, & Liu, 2014). Executives who also serve on the board of directors (i.e., inside directors)
are associated with REM, which may compromise independent directors from identifying management’s motivation for making operational or investment decisions that have short-term financial reporting benefits, but may ultimately compromise long-term financial reporting or the company’s risk of insolvency (Visvanathan, 2008). Stock ownership by inside directors is also associated with REM, suggesting that inside directors condone the opportunistic use of REM to preserve their compensation packages (Garva, 2105).

The size of the audit firm has often been linked with higher quality audits as larger firms seek to minimize the reputation damage that could result from an audit failure
(Francis, 2004). Consistent with that notion, larger audit firms are associated with less GAAP-based earnings management, but often have clients that are more likely to turn to REM, which falls outside of the external auditor’s purview (Cohen et al., 2008). Companies appear to develop a comfort level with employing REM to meet desired reporting results when the same audit firm has been retained by the company for many years.

METHODS FOR DETECTING AND DISCLOSING REAL EARNINGS MANAGEMENT BEHAVIOR

Once ACs and IA identify the environment in which REM may be used by management to satisfy Wall Street’s earnings expectations, and consider the risk to long-term financial performance and organizational solvency, it is important that specific steps be taken to identify decisions that reflect REM practices. Identifying unusual transactions either due to the transactions magnitude or timing can help the AC assess management’s motivation for

### Exhibit 3

**Company Characteristics Associated with Real Earnings Management Activities**

- Manufacturing companies and companies with larger net operating assets (Cohen & Zarowin, 2010; Roychowdhury, 2006)
- Relatively high levels of inventory (Roychowdhury, 2006)
- Companies in historically litigious industries (Cohen & Zarowin, 2010)
- Lower degree of share ownership by institutional investors (Roychowdhury, 2006)
- High levels of debt and risk exposure (Herrmann et al., 2003; Roychowdhury, 2006)
- Greater financial health and market share (Zang, 2012)
- Lower marginal tax rates (Zang, 2012)
- Less accounting flexibility (Zang, 2012)

### Exhibit 4

**Governance Characteristics Associated with Real Earnings Management Activities**

- Audit committee members who hold outside directorships (Sun et al., 2014)
- Infrequent audit committee meetings (Garva, 2015)
- Less board of director independence (Visvanathan, 2008)
- Larger proportion of company shares owned by insider directors (Garva, 2015)
- The use of larger external audit firms (Cohen & Zarowin, 2010)
- Longer auditor tenure (Cohen & Zarowin, 2010)
such decisions, the impact on the transparency of the subsequent financial disclosures and whether long-term financial performance and solvency will be compromised. In the event that REM has been identified by the AC, a variety of disclosure options are available to the AC so that financial statement users can be better informed about the company’s financial status and performance.

Exhibit 5 provides examples of techniques that ACs may use to detect REM activity so the ACs can provide a more thorough and effective assessment of the companies’ long-term solvency and effective use of resources. Budget-to-actual variation analysis can be used to identify unusually high levels of inventory production variances during the latter stages of the accounting period in order to understate cost-of-goods-sold expenses. Other indicators of abnormally high levels of inventory production could be relatively fewer customer orders given the level of production that should generally correlate to sales, as well as lower inventory liquidation ratios that may also suggest that inventory levels are unreasonably high given customer demand.

Since prior research reveals that management uses REM when flexibility in accrual choices is limited, it’s likely that REM will more likely surface at the end of the reporting period, when it can be more easily determined whether earnings benchmarks will be achieved and whether REM will be necessary. ACs should attempt to identify transactions that are material in magnitude (i.e., affect EPS) and in the period just before earnings are released. The AC could then discuss these transactions with management and determine whether such transactions are in the company’s best interest and whether the financial statements continue to reflect the true operating performance.

More strategic REM techniques like the delay investment decisions or stock buy-backs may also be detectable with the analysis of information that should be readily available to ACs and IA. Management’s decision to delay investment projects to defer related expenses can be identified by comparing the actual progress of construction projects to the timelines that had been previously established and possibly approved by the board of directors. If the construction-in-progress accounts that are used to track the costs of ongoing projects falls short of budgeted levels, then AC would be able to address the issue with management and ascertain whether the delays are warranted, or whether they simply reflect management’s reliance on REM. The excessive or unjustifiable use of stock repurchases as a REM technique is a more direct approach to meeting earnings benchmarks. The AC may still be able to detect more dubious repurchases by comparing current treasury share balances to the company’s historical averages, or noting when such balances far exceed what is required to fund employee stock ownership plans (ESOPs) and other stock-based compensation arrangements. Based on management’s explanation for the unusually high treasury share balances, the AC could then determine whether such equity transactions are appropriate, or simply used to meet analysts’ EPS expectations. Such an analysis may also help ACs conclude whether cash used to reacquire shares from the market could be better used by management for other long-range, value-adding endeavors.

The liquidation of operating assets prematurely, or selling inventory for below market prices directly impacts current period earnings, but also has a detrimental impact on subsequent period performance. When the sale of fixed assets occurs, AC members can determine whether such sales happen prior to the end of the assets’ predetermined useful life and if the resulting gain on that sale helps the company satisfy analysts’ EPS expectations. When management is unable to provide viable reasons for doing so (e.g., change in product line), AC may conclude that REM is being opportunistically used in a manner that is inconsistent with investors’ long-term goals.

The AC may also monitor changes to unit sales prices for certain product lines when such changes accompany periods in which management expects to just meet or exceed analysts’ EPS expectations. Inquiries of management regarding reductions in sales prices that occur later in the reporting period and that deviate from competitors’ pricing may reveal REM behavior. To ensure transparency of the impact of this behavior on investor decision making, the AC could require management to downwardly adjust subsequent period sales forecasts so that investors can be aware of the eventual drop in sales that would occur if customers are enticed to make purchases in the current period to enjoy such discounted prices.
**Exhibit 5**

**Methods for Detecting Real Earnings Management**

<table>
<thead>
<tr>
<th>REM Technique</th>
<th>Detecting REM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormally high production of inventory (Roychowdhury, 2006)</td>
<td>• Budget-to-actual variances.</td>
</tr>
<tr>
<td>Deferred discretionary expenses (advertising and R&amp;D; maintenance expenses; general and administrative) (Roychowdhury, 2006)</td>
<td>• Identify material transactions prior to end of reporting period that would enable the company to exceed earnings forecasts when it was otherwise not possible.</td>
</tr>
<tr>
<td>Delay investment projects (Graham, 2005)</td>
<td>• Compare scheduling with what was approved by board of directors’ meeting minutes.</td>
</tr>
<tr>
<td>Stock repurchases (Hribar et al., 2006)</td>
<td>• Negative variances in construction-in-process accounts.</td>
</tr>
<tr>
<td>Sales of profitable assets (Herrmann et al., 2003)</td>
<td>• Relative size of treasury stock balances are higher than historical levels.</td>
</tr>
<tr>
<td>Sales price reductions and flexible credit terms (Jackson &amp; Wilcox, 2000)</td>
<td>• Treasury stock levels significantly exceed what needs to be available to fund employee stock ownership plans.</td>
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**IMPLICATIONS FOR AUDIT COMMITTEES AND INTERNAL AUDITORS**

The AC and the IA are critical internal control mechanisms that help ensure that an entity’s financial statements are free of material misstatements, even when such misstatements result from management’s opportunistic operational and investment decisions. Professional and regulatory standards hold the AC and the IA responsible for risk assessment and cite credible financial information as tool for conducting risk analysis and measuring long-term solvency. The NYSE and NASDAQ listing requirements specify the role of the AC and IA in working together to ensure that credible information is available to perform ongoing risk assessments, and public accounting guidance as also acknowledges the joint role of IA and the AC in assessing risk (IIA, 2015; SEC, 2013).

The Institute of Internal Auditors (IIA) has addressed the importance of risk assessment and have labeled the AC and IA as the third and final line of defense in the COSO Defense Model. The IIA also notes that IA is uniquely positioned to assist the AC with risk assessment given IA’s knowledge of the nuances of operational transactions and the effect such transactions have on the transparency of financial accounting information (IIA, 2015). These responsibilities, along with the SEC’s growing concern regarding aggressive financial reporting to meet Wall Street expectations, should prompt AC members and IA to reevaluate their respective roles in measuring the impact of REM on the credibility of financial information.
In the event that the AC or IA determine that REM has been used by management to influence earnings and possibly meet analysts’ EPS expectations, existing disclosure mechanisms may help investors become aware of the likelihood that the resulting financial statements may be too optimistic. The IA function could report any instances of suspected REM to the AC to consider and discuss with management. If management is adamant about the appropriateness of its decisions, the AC could encourage management to provide shareholders with additional information so that any subsequent financial impacts could be better incorporated in investor trading decisions. Such disclosures could be included in the Management Discussion and Analysis section of the 10-K filing, or detailed in the Notes to the Financial Statements.

The financial statements and SEC filings are ultimately the responsibility of management, but the financial statements must also be recommended by the board of directors, with the underlying endorsement of the AC to be filed with the SEC. This provides the AC with some leverage regarding the inclusion of disclosures that assist financial statements users who attempt to tease out the effects of REM when assessing a company’s financial performance.

The Audit Committee Report provides a more direct disclosure mechanism for the AC since the content of that report is not subjected to management’s influence and, therefore, could include more objective discussion of the impacts of any REM that has been detected by the IA or the AC. If management were aware of the AC’s ability to communicate any suspected REM activity to financial statement users, then management may be deterred from engaging in such practices from the outset.

During a period of greater scrutiny by external auditors, companies’ willingness to adopt REM could potentially have negative long-term implications for share price and organizational solvency. The AC and IA must work to ensure that an effective system of internal controls is maintained so that REM does not result in financial information that prohibits investors and AC from assessing the long-term viability of the company. This level of vigilance requires AC and the IA to work collaboratively and creatively in ensuring that management’s inherent desire to meet earnings expectations does not come at the expense of the integrity of their financial reports or the appropriate use of company resources. As pressure continues to mount on companies to satisfy Wall Street, management will continue to attempt to circumvent the scrutiny of the external auditor to achieve earnings targets. The AC and IA must modify its approach to financial reporting oversight so that alternative earnings management techniques do no compromise the transparency and integrity of financial statements.

NOTES


REFERENCES


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