EARNINGS MANAGEMENT, FRAUD, AND COMPENSATION

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Earnings management involves accelerating recognition of revenue or postponing recognition of expenses in order to enhance current-period earnings even though future-period earnings can be diminished as a result. For two examples, “channel stuffing” - shipping product under very lenient credit terms, and capitalizing R&D items that should be expensed will improve current revenues and earnings but reduce at the expense of reduced future revenues or increased future expenses.

Ultimately, the accounting earnings should be tied to items that enhance shareholder wealth. When shareholders are richer as a result of the firm’s activities, then those earnings should be recognized. The only difference between accounting earnings and the change in shareholder wealth is whether we measure at market value or at book value.

<table>
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<tr>
<th>Economic income</th>
<th>Accounting income</th>
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<tbody>
<tr>
<td>Measured at market value: $P_t - P_{t-1} + D_t$</td>
<td>Measured at book value: $BVE_t - BVE_{t-1} + D_t$</td>
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Where $P$ is the market price per share, $BVE$ is the book value of equity per share, $D$ is the Dividend paid and $t$ indicates the time period. Since market value is forward looking on earnings and cash flows while accounting earnings, being conservative and objective, is backward looking, the argument could be made that accelerating recognition of future earnings is in keeping with shareholder and market valuation processes. Excesses in that acceleration process, however, could border upon fraud.

Academic studies have found extreme levels of earnings management around critical events for a firm. In these academic studies, earnings management is measured by abnormal increases in accruals. When revenues are accelerated or expensed are deferred, the accounting process will produce increases in accrual items, but so will normal increase in business activity. Therefore, in order to measure earnings management, the accruals in excess of normal accruals need to be identified. Since long-term accruals are less subject to management judgment than short-term accruals the focus on estimating and measuring abnormal accruals is on current rather than long-term accruals and on discretionary accruals rather than accruals required by the level of business activity.

There is a three step process to measuring discretionary current accruals in order to proxy earnings management:

1) By using an estimation sample of industry and size-matched firms, estimate the relation between
current accruals and sales, with both normalized by total assets.

2) Using sales change for the firm in question, estimate non-discretionary current accruals from (1) above.

3) Take difference between current accruals and non-discretionary current accruals estimated in (2) above.

One of the first studies of earnings management by Jones (Accounting Review, 1991) found evidence that firms manage earnings downwards when they are seeking import relief and tariff protection from the government. A later study by Perry and Williams (Accounting Review, 1994) found that earnings tend to be managed downwards prior to management buyout offers, perhaps leading to a depressed stock price that could be exploited by managers taking over the company. Three studies find evidence of significant upwards earnings management prior to stock offerings. Teoh, Welch and Wong (Journal of Financial Economics, 1998) show this evidence prior to initial public offerings, Rangan (Journal of Financial Economics, 1998) shows that firms manage earnings prior to seasoned equity offering and Chou, Gombola, and Liu (Journal of Financial and Quantitative Analysis, 2006) show earnings management prior to reverse LBOs.

Not only is the level of earnings management statistically significant in these studies but also material in a valuation context. The average level of abnormal accruals prior to IPOs is about 5 percent of assets and is about 4% of assets prior to reverse LBOs. Considering that earnings is typically about 10 percent of assets, and is usually at a lower level for IPO firms that are valued based on their growth opportunities, earnings management may be responsible for over half of the earnings shown by companies offering common stock in IPOs, SEOs, or reverse LBOs. Moreover, the companies with the greatest degree of earnings management underperform to the greatest extent following the equity offering.

After finding evidence of earnings management associated with offerings, studies then branched out to find whether this earnings management is related to fraud litigation, whether good governance practices mitigate earnings management, and whether earnings management is linked to executive compensation. Earnings management has been linked to fraud lawsuits by DuCharme, Malatesta and Sefcik (Journal of Financial Economics, 2004). They show that the incidence of lawsuits and of lawsuit settlements for fraud in SEOs is related to the level of pre-offering abnormal accruals. Targets of litigation appear to exhibit particularly strong evidence of opportunistic earnings management. Therefore, offering price manipulation by earnings management can be considered to be sufficiently egregious as to constitute fraud.

Since the incidence of fraud has been shown to be ameliorated through good corporate governance practices, such as increasing independent outside directors on the board and particularly on the audit and compensation committees, good governance practices should also lead to lesser degrees of earnings management. Xie, Davidson and DaDalt (Journal of Corporate Finance, 2003) show that more outside directors and more financially sophisticated members of the audit committee lower the likelihood that a firm will engage in earnings management.

Management has a strong incentive to manage earnings in order to obtain the highest possible price in a stock offering, but also could have an incentive to manage earnings in order to maximize their own compensation, particularly when compensation is based on earnings measures. The incentive to manage earnings is particularly acute under an earnings-based compensation system with an earnings floor target and linearly rising compensation after floor earnings are achieved. The incentive is to manage earnings upwards in order to exceed the floor target, or, if the floor target is unreachable, to manage earnings downwards in order to conserve earnings for a future period. The
result of this perverse incentive is to add volatility to earnings since management will try to load in write-offs when earnings are poor and to manage earnings upwards even more when the company is doing well. Firms will then rarely undershoot the target floor by small amounts but will often exceed the target floor by small amounts. A working paper by Carter, Lynch and Zechmann (2006) compares earnings management behavior before and after the passage of Sarbanes-Oxley. They show that, both before and after SOX, managers have incentives to manage earnings upwards when the need for greater earnings arises. After SOX, however, there is less evidence of managing earnings downward.

QUESTIONS

Can you identify managed earnings at your company? How would you detect earnings management?

Describe your board composition. Does the board and, particularly, the audit committee, have the experience to be able to identify and to minimize earnings management.

How are earnings-based incentive systems structured at your company?

Can you devise an incentive system that constrains the propensity to engage in earnings management?