

A REVIEW OF EARNINGS MANIPULATION LITERATURE AND THE IMPLICATIONS ON MANAGEMENT COMPENSATION

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Abstract

The growth of corporations resulted in the owners (shareholders) ceding the responsibility of running these corporations under the ambit of Management. The Management is responsible for implementing the policies and decisions of the corporations taken by the owners. The paper reviewed earnings manipulation perpetrated by Management as a result of their compensation. The review dealt with what earnings are, the components and measurement of earnings, what constitutes quality earnings, and the meaning of earnings manipulation.

Keywords: Earnings, Compensation, Manipulation, Management

Introduction

The growth of corporations called for the ceding of the running of such corporations today in the care of a group called Management. The owners of these corporations are otherwise termed shareholders. As a result of the 'Agency Theory', there is the need for the separation of corporate management from the owners. The stewardship given to management by the owners of the corporation could be in the form of a contract for a specific period of time or the accomplishment of a certain target of performance in return for compensation. The compensation received by management is varied and could range from equity to higher pay-for-performance. Crudely, the performance of a corporation is measured by the earnings as a bottom-line item in the income statement.

Earnings, What Are They?

First and foremost, earnings represent a key component in valuing an enterprise. This is most often seen in a commonly and widely used measure: The price/earnings multiple. As earnings represent a large driver of value, it needs to be examined.

According to Rahi-Belkaoui (2000, p. 27), “earnings are merely the difference between revenues in a period and the expenses incurred in earning those revenues.”

The matching principle in accounting is at play here. Rahi-Belkaoui (2000, p.127) identifies two steps in the matching principle as follows:

1. *Revenue recognition or timing through the realization principle must be adhered to, and,*
2. *Expense recognition in three possible ways needs to take place:*
 - a. *Associating cause and effect, such as for cost of goods sold,*
 - b. *Systematic and rational allocation, such as for depreciation, and*
 - c. *Immediate recognition, such as for selling and administrative costs.*

The matching principle postulates the revenue/expense view of earnings which sees earnings as matching revenues against expenses in the appropriate period and, possibly gains and losses if they exist.

Another view of earnings is the assets/liabilities view where earnings represent the increase in the net assets of an organization other than capital in a given period. This view is also called the balance sheet or capital-maintenance view. According to Rahi-Belkaoui (2000), this view holds that revenues and expenses result only from changes in assets and liabilities. Revenues are increases in assets and decreases in liabilities; expenses are increases in liabilities and decreases in assets. Some increases and decreases in the net assets are excluded from the definition of earnings: capital contributions, capital withdrawals, corrections of earnings of prior periods and holding gains and losses.

Lee (1996), however, argues that the matching process brings about a judgmental setback in accounting.

Earnings Components

Rahi-Belkaoui (2000) identified components of earnings as revenues and expenses, and gains and losses.

The International Financial Reporting Standards (IFRS), (International Accounting Standards 18, 2007 p. 1063) defines revenue as: “the gross inflow of economic benefits during the period arising in the course of the ordinary activities of an entity when those inflows

result in increase in the equity, other than increases relating to contributions from equity participants.” IAS (18) further states that, revenue shall be measured at the fair value of consideration received or receivable. The standard goes further to give the criteria for the recognition of revenue arising from the sale of goods, rendering of services and, interest, royalties and dividends.

Rahi-Belkaoui (2000, p. 130), explains the components of earnings from the asset/liability and revenue/expense views of earnings. From the asset/liability point of view, revenues which include gains and losses are defined as “increases in the assets or decreases in the liabilities that do not affect capital,” while expenses encompass gains and losses defined as “decreases in the assets or increases in the liabilities arising from the use of economic resources during a given period.” From the revenues/expenses view, Rahi-Belkaoui (2000, p. 130) defines revenues as:

gains and losses resulting from the sale of goods and services, and includes gains from the sale and exchange of assets other than inventories, interest and dividends earned on investments, and other increases in owners' equity during a period other than capital contributions and adjustments.

Invariably, expenses include all the expired costs that relates to the relevant reporting period.

Gains, according to the asset/liability point of view are increases in net assets other than increases from revenues or from changes in capital; losses as decreases in net assets other than decreases from expenses or from changes in capital (Rahi-Belkaoui, 2000).

From the revenue/expenses view, Rahi-Belkaoui (2000, p. 131), defines gains as: “the excess of proceeds over the cost of assets sold, or as windfalls and other benefits obtained at no cost or sacrifice.” For example, profit made by a firm on the disposal of fixed assets, where the proceeds received exceeds the cost of the asset. While losses are also defined as “the excess over the related proceeds, if any, of all or an appropriate portion of the costs of assets sold, abandoned, or wholly or partially destroyed by casualty (or otherwise written off), or as costs that expire without producing revenue.”

It stands to mean that gains and losses do not derive their explanation from revenues and expenses.

Rahi-Belkaoui (2000) identified three major relationships between earnings and the components of earnings as follows:

1. Earnings = Revenue - Expenses + Gains - Losses.
2. Earnings = Revenues – Expenses

3. Earnings = Revenues (Including Gains) – Expenses (Including Losses).

The first relationship provides a better relationship of earnings by defining each component of earnings explicitly; while the second and third relationships do not give clear definitions of earnings by combining the components of earnings as either revenues or expenses.

Measurement of Earnings

Measurement of earnings arises out of the transactions that occurred within a particular period. This is the 'transactions' basis in accounting. According to Lee (1996), the basis for measuring traditional accounting income is the transactions which the business entity engaged in with third parties in its operational activities.

Transactions entered into can be categorized mainly into revenues (received or receivable) and, costs or expenses (paid or payable). In this regard, the recognition and accrual principles in accounting play a crucial role in the measurement of earnings. In terms of revenue, when goods are sold or services are rendered this eventually leads to the receipt of cash or the creation of a receivable within the relevant reporting period. Likewise, an expense, when a benefit is derived by an entity, either a cash payment is made or a payable is incurred.

The International Financial Reporting Standards (IAS18, 2007, p.1065) gives the criteria for recognizing various categories of revenue.

It states that revenue from the sale of goods shall be recognized upon the existence of the following conditions:

- (a) The entity has transferred to the buyer the significant risks and rewards of ownership of the goods;*
- (b) The entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;*
- (c) The amount of revenue can be measured reliably;*
- (d) It is probable that the economic benefits associated with the transaction will flow to the entity; and*
- (e) The costs incurred or to be incurred in respect of the transaction can be measured reliably.*

With reference to revenue from the rendering of services; when the outcome of a transaction involving the rendering of services can be estimated reliably, then revenue

associated with the transaction shall be recognized by reference to the stage of completion of the transaction at the balance sheet date (IFRS: IAS 18).

IAS18 (2007, p.1066) states that the outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- (a) *The amount of revenue can be measured reliably;*
- (b) *It is probably that the economic benefits associated with the transaction will flow to the entity.*
- (c) *The stage of completion of the transaction at the balance sheet date can be measured reliably; and*
- (d) *The costs incurred for the transaction and the costs to complete the transaction can be measured reliably.*

The measurement of traditional accounting income emanates from the transactions that the organization has undertaken in its operational activities within a particular period of time (Lee, 1996). Invariably, the transactions will relate to core revenues received from the sale of goods or from services rendered, and the associated costs incurred in achieving the revenues. It is supposed that these transactions will result in cash receipts and cash payments within the relevant periods of measurement. However, if eventually the cash receipts and payments are not complete then the accrual principle applies. The accrual principle in accounting allows for adjustments to be made to accounting transactions that relates to the relevant reporting periods (timing differences required by the matching principle). In terms of sales, the total sales (value), transactions will normally include both cash sales and credit sales, of which the credit sales create debtors. Likewise with purchases, the total purchases figure will normally include both cash purchases and credit purchases, with the credit purchases creating creditors Lee (1996).

An analysis of the cost that has been recorded and the appropriate segregation of these costs into those that are attributable to the revenue of the reporting period and those that are to be carried forward are made.

After effecting the necessary adjustments, the recognized revenues and costs within the reporting period are matched to derive the earnings (income).

Lee (1996, p. 49-50) summarizes the traditional accounting process of measuring earnings as: *first to define the particular accounting period, secondly to recognize the revenues of that period, thirdly to recognize the corresponding costs; and fourthly to match those costs relevant to the recognized revenues, carrying forward the residue of allocated costs for matching with subsequent periodic revenues.*

Comprehensively, Generally Accepted Accounting Principles (GAAP), measures earnings through the net income approach (Carlson and Sahinoz, 2003). Net Income is the difference between total sales and both total costs and expenses from operations plus income or losses from other sources. The build-up for total cost is cost of goods sold, plus depreciation of plant, equipment and other capital goods (direct expense, also known as CGS or CSS, variable expenses, above the line expenses, material, labour and overhead [MLO]). Total expenses on the other hand include selling, general, and administrative expenses, financing costs and taxes (indirect expenses also known as SG&A, fixed expenses, and below the line expenses).

Earnings of a business are the most studied number, since it determines the profitability of a business. Earnings, is a key determinant of a business's share price. Investors therefore rely on profitability measures to make informed investment decisions regarding the acquisition or disposition of shares of a company.

Earnings Quality

Penman and Zhang (1999, p.1), from the perspective of forecasting future earnings, interpret 'Earnings Quality' "...as a firm's reported earnings that are purged of extraordinary items as being good quality if it is a good indicator of future earnings."

Dechow, Ge and Schrand (2009, p.1), also tried to define earnings quality by stating that "higher quality earnings more faithfully represent the features of the firm's fundamental earnings process that are relevant to a specific decision made by a specific decision-maker." Their assertion implies that earnings quality is irrelevant unless it is linked to a specific decision, because stakeholders, particularly investors rely on the earnings numbers to make their decisions.

Conservatism in the practice of accounting is claimed to yield higher quality earnings. According to Penman and Zhang (1999), conservatism is an accounting practice that tends to consistently maintain the book values of net assets relatively low. Conservatism yields lower earnings, because both revenues and expenses (costs) are kept low which presumes that conservative earnings are of a higher quality. That is, faced with two methods to present items financially, the company and the auditor are to choose the more 'conservative' measure.

Lo (2007), contends that earnings management and earnings quality share a lot of features. Furthermore, Lo (2007) argues that highly managed earnings have low quality, but that the absence of earnings management is not sufficient to guarantee high quality earnings

as several factors determines the quality of earnings reported by an entity. This argument means that there are still other factors apart from earnings management that determine earnings quality.

According to Katsuo (2008), that earnings quality is discussed from the perspective of value relevance or its usefulness for decision-making, and measurement is examined in connection with capital markets. This draws a relationship between earnings and share price as capital markets will react depending on the quality of earnings reported within a particular period. Perman (2003), as cited in Katsuo (2008), explains that it is high quality earnings that will become a better index of future earnings. Hawkins and Campbell (1978) and Bernstein et al (1998) as cited in Katsuo (2008), state that more conservative earnings are seen as higher quality; which confirms the view held by Penman and Zhang (1999) that, the more conservative earnings are, the higher the quality.

Sloan (1996), states that accounting earnings are made up of two components, that is a cash component that provides relevant information, reliable and less subjective to distortions; and an accrual component that provides relevant information, but which reliability has potentially been compromised. They further contend that the accrual component of earnings is less persistent than the cash component. It means that management could use the accrual principle in accounting to reduce the quality of reported earnings in a particular reporting period as reported earnings under accrual accounting deviates from the cash generated from operations (Larcker and Tayan, 2010). For example, in order to puff up revenue, all that is needed is a journal entry to revenue and accounts receivable. That is, no cash has been received; rather only a book entry had been made that creates the revenue amount.

Accrual accounting recognizes financial transactions of a firm in the period in which they occurred (or were incurred) rather than when cash is received or paid by the firm. This tends to provide a stronger indication of a firm's performance than current cash receipts and payments. Richardson et al. (2001), argues that increases in accruals that are attributable to reductions in the efficiency of asset usage are consistent with a reduction in earnings quality. The size of accruals in reported earnings has implications on the quality of the particular earnings.

Dechow, Ge and Schrand (2009), identified six (6) main determinants of earnings quality as: 1) firm characteristics, 2) financial reporting practices, 3) governance and control, 4) auditors, 5) equity market incentives and 6) external factors.

What is Earnings Manipulation?

Beneish (1999, p.3) defines earnings manipulation as "...an instance where management violates Generally Accepted Accounting Principles (GAAP) in order to beneficially represent the firm's financial performance." Beneish and Nichols (2007) indicate that earnings manipulation typically occurs through the exercise of discretion over accruals. That manipulation entails the artificial inflation of revenues or deflation of expenses; therefore, variables that result in the simultaneous swell of assets have predictive value.

Earnings manipulation is of concern to regulators, investors, professional investment analysts, and other users of financial statements because of the repercussions it has on capital markets through the prices of shares. When reported earnings are manipulated upwards, earnings per share also usually increases, all other things held constant; hence, a rise in the share price. Shareholders and other investors will likely therefore be denied access to the right information affecting investment decisions. This is because shareholders' decisions in relation to the capital markets are three-fold: 1) to purchase, 2) to sell or 3) to hold a company's shares. However, this is influenced by reported financial information put out by the company in terms of its performance (earnings). Beneish (1997) used financial statement information to develop variables that can be used to predict the manipulation of earnings by firms. The modus operandi of manipulative firms is to engage in the recording of fictitious revenues or revenues that do not exist nor were earned by the firm, record fictitious inventory and/or improperly capitalizing costs (Beneish, 1999). Accounting data found in financial statements are very important for detecting manipulation of earnings. Beneish (1999) presumed that earnings manipulation is more likely when firms' future prospects are poor. The expectations of those who manage earnings are achieved when they are able to get earnings managed in their favour.

According to Friebel and Guriev (2005 p.1), "...corporate insiders often have direct evidence that top executives engage in manipulation." They contend further that outsiders, who automatically are not part of management of the organization, rely on the management for financial information through the financial reports of the organization having given them the stewardship of the enterprise. However, management sometimes abuses this trust and in the short-run some top management has the incentive to manipulate earnings.

Friebel and Guriev (2005) again indicated that when management contracts are short, then there is the tendency for earnings manipulation as the manager would like to rake in more benefits before the expiration of the contract. That the incentive for manipulation of earnings is related to the contract structure; and the more short-term the contract, the more

likely management will inflate earnings. This implies that there is a relationship between the contract structure and manipulation of earnings. When management compensation generally is tied to earnings, there is a great tendency for management to overstate earnings. On the contrary again, Friebel and Guriev (2005) have it that management may understate earnings for tax purposes in order for the company to pay less on tax – especially if the entity is a cash versus accrual reporting entity.

Cornett, McNutt and Tehranian (2009), posits that incentive-based compensation has a large impact on financial performance as measured by reported earnings. They further contend that when the Chief Executive Officer's compensation is tied to the price of the firm's stock (either through compensation in the form of stock options), the firm's value increases.

Peng and Roell (2006) argued that if executive pay is sensitive to short-term performance measures such as share prices and earnings, it may lead executives to manipulate these measures. This is in consonance with the assertion by Cornett, McNutt and Tehranian (2009) and, Friebel and Guriev (2005) that when the executive contracts are short-term there is a high tendency of manipulation.

Peng and Roell (2007) provided evidence to show that earnings are manipulated upwards in periods of class litigation between executives and shareholders.

Healy (1985) and Guidry et al. (1999) found evidence to show that indeed managerial accounting decisions taken by management are related to the incentives provided by their bonus contracts such that, management will take decisions that are favourable to their bonuses. Again, Holthausen, Lacker and Sloan (1995) also found evidence consistent with the hypothesis that managers manipulated earnings downwards when their bonuses are at their maximum since there will be no further gains in manipulating earnings upward.

Allegedly, high equity-based incentives push managers to engage in myopic acts aimed at maintaining stock prices and earnings at artificially high levels in the short-term, (Sudarshan and Todd, 2010).

Performance-based incentives tend to align the incentives of managers of corporations to those of shareholders. The relationship between earnings and stock price seem to provide avenue for managers to manipulate earnings upwards and consequently a rise in stock price. A solution to the “agency” problem brought about stock grants to top management as a measure of aligning executives' interest with shareholder value (Crocker and Slemrod, 2009).

However, this backfired in the 21st century as managers try to misrepresent the true performance of corporations due to their incentives (Crocker and Slemrod, 2009). It turned

out that this package for managers to receive stock as a performance-based compensation to deal with the agency gap between the owners and managers of corporations rather encouraged managers to practically manipulate earnings upwards to raise the share price (Crocker and Slemrod, 2009).

Ke (2001) states that Chief Executive Officers (CEOs) who have higher equity positions with free stock and prompt exercisable options may be involved in earnings management by quickly making press releases of any little rise in earnings as against any small decrease in earnings. Again, Chief Executives Officers may also be quick to report long strings of earnings when they are rising. Also, Gao and Shrieves (2002) revealed that managers have stepped up the use of discretionary accruals in managing earnings as it relates to options and bonuses than with salaries.

Crocker and Slemrod (2009) concluded that an optimal compensation scheme should be sought with the objective to discouraging deceitful financial reporting to shareholders and other potential investors. They agree to a certain extent that even though earnings manipulation is not a good practice; eliminating it totally will disincentivize managers to engage in activities that will maximize profits. Crocker and Slemrod (2009) concluded that managers will not be honest in reporting and maximizing earnings once their compensation is tied to the reported earnings. They argued that other options of compensating managers should be crafted apart from the earnings-based compensation which does not provide the true financial information of the company to shareholders and other potential investors.

Healy (1985) indicates that with bonus schemes, managers could be incentivized to select between income-increasing or income-decreasing discretionary accruals depending on the expected earnings and the parameters of the bonus plan. Camara and Henderson (2009, p.1) on the other hand in their research using “Real Earnings Performance Based Stock” (REPBSO); concluded that performance-based compensation can motivate risk averse managers to deliberately undertake risk increasing operating policies in the form of selling to high credit risk customers. Delgado and Lara (2001) concluded that when engaging in manipulation of earnings, managers have a number of options to choose from such as event period or multi period to arrive at the level of earnings that is suitable to them.

In short, in as far as some management will manipulate earnings upwards due to their compensation, they could also manipulate downwards when evading tax and at the peak of their bonuses (Friebel and Guriev, 2005).

According to Feg, Ge, Luo and Shevlin, (2010), Chief Executive Officers (CEOs) of manipulation firms tend to have significantly higher incentives and power than CEOs of

better controlled firms. They argued that Chief Financial Officers (CFOs) can get involved in earnings manipulation for their immediate personal financial gains as contained in their equity compensation. Also, CFOs may be pressured by CEOs to manipulate earnings. Pressure to sustain or attain a certain level of performance can result in earnings manipulation by firms. A clear example is Enron Corporation which was engulfed in major.

Conclusion

Management compensation, when tied to a short-term contract, earnings or the performance of stock has implications on the measurement of earnings and subsequently the performance of a company. The shorter the contract, the more likely management will manipulate earnings in their favour before the expiration of the contract, contrary to a longer term contract. Again, management in most cases will manipulate earnings upwards if their compensation is tied to the performance of stock given the positive relation between earnings and stock price (Wayo, 2013). This position becomes pervasive when management has a stock grants and a term contract employment; they tend to manipulate earnings upwards which results in higher share price and, subsequently they off-load their stock prior to the expiration of their contract. Even though in some instances management could manipulate earnings downwards to evade tax; this is not a popular position of management. As indicated by Crocker and Slemrod (2009), it will better to put in place an optimal compensation package for management to discourage them from engaging in the manipulation of earnings and, also to present incidence-free financial reports.

Aflatooni and Nikbakht (2010) hypothesized that in the long-run, market response to firms that engaged in income smoothing and earnings management is negative. It was also found that firms involved in income smoothing to avoid losses have significantly lower long-run returns and abnormal returns than firms that do not.

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