

The Theoretical Framework of Earnings Management

LA STRUCTURE THÉORIQUE DU MANAGEMENT DES REVENUS

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Abstract: The definition of earnings management has been inconsistent in the literature. Major problems with the definition include ambiguity and immeasurability. As a solution, this paper intends to develop a constructive definition of earnings management and discuss the conceptual distinctions between earnings management and its counterparts. The review of the literature provides evidence of the validity of the developed definitions. The results of the paper are important for both theoretical and empirical researches on earnings management, as well as for regulators, lawmakers, firms' contracting parties and investors.

Keywords: earnings, management, manipulation, fraud

Résumé: La définition du management des revenus a été contradictoire dans la littérature. Les problèmes majeurs sur la définition comprennent l'ambiguïté et l'immesurabilité. En tant que solution, ce document a l'ambition de développer une définition constructive du management des revenus et de discuter sur les distinctions conceptuelles entre le management des revenus et ses contreparties. La revue de la littérature sert le témoignage de la validité de définitions développées. Les résultats de ce document sont importants pour les recherches théoriques et empiriques sur le management des revenus, aussi pour les régulateurs, législateurs, les parties contractuelles et d'investissements des entreprises.

Mots-clés: earnings, management, manipulation, fraud

1. INTRODUCTION

This paper intends to study the theoretical framework of earnings management by developing a constructive definition of earnings management and discussing the conceptual distinctions between earnings management and its counterparts. Earnings, represented by the bottom line of the income statement, is a summary item in financial statements. Financial statements are firms' primary way of communicating firm value and performance to shareholders and other relevant parties. They provide an avenue through which managers disseminate some privately held information. The preparation of financial statements is guided and regulated by accounting standards, rules, or principles, called as the generally accepted accounting principles

(GAAP) in the United States. Every country has its own accounting standards.

The research is motivated by the following four facts. First, the literature has revealed an inconsistency in the definitions of earnings management, especially on the question if earnings management is a *fraud*, triggering confusions in the understanding of earnings management. Second, the various definitions of earnings management in the literature, especially the most cited ones, are problematic especially from the perspective of empirical researches. Third, to my knowledge, never has earnings management been measured directly in empirical researches, indirect measures (e.g. indicators that measure the possible consequences of earnings management) are used instead. The major problems with indirect measures include their representiveness of the unit and if they are caused by multiple reasons besides earnings management. Fourth, there had been mixed results from empirical

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research on earnings management, making the interpretation difficult. Plausible explanations for the fact include that earnings management has different meanings in different researches, and/or the measures used for earnings management were noisy.

The paper proceeds as follows. The next section offers a constructive definition of earnings management. Section three reviews the definitions of earnings management found in prior researches for the purpose of evaluating the definitions developed in section two. Section four explains the significance of this research as a conclusion.

2. A CONSTRUCTIVE DEFINITION OF EARNINGS MANAGEMENT

As a solution to the problems caused by the inconsistency in the definitions of earnings management, this paper distinguishes earnings management from earnings manipulation, earnings fraud, and creative accounting. In the paper, “earnings manipulation” means that management takes deliberate steps to bring reported earnings to a desired level; “earnings management” refers to the earnings manipulation through exercising the discretion accorded by accounting standards and corporate laws, and/or structuring activities in such a way that expected firm value is not affected negatively; “earnings fraud” refers to the earnings manipulation by violating accounting standards and corporate laws, and/or structuring activities in such a way that reduces expected firm value; while “creative accounting” refers to the earnings manipulation practices that do not violate accounting standards or corporate laws because of the lack of relevant standards or laws, for example, when firms engage in business innovations.

Earnings manipulation has five distinctive features under the proposed definition. First, earnings are manipulated by management rather than accountants. Second, earnings are manipulated knowingly and intentionally. Hence, earnings manipulation is different from unintentional errors such as mistakenly entering incorrect numbers by accountants. Third, the steps taken for earnings manipulation include not only accounting choices but also real business decisions. For instance, accelerating the timing of sales through increased price discounts or more lenient credit terms might lead to an increase in the current period’s reported earnings but a decrease in expected firm value. Earnings manipulation by means of business decisions is named as “real earnings manipulation”, while earnings manipulation by means of accounting choices is “paper earnings manipulation”. Fourth, the type of earnings manipulated in paper earnings manipulation is reported earnings, while the type of earnings manipulated in real earnings

manipulation is economic earnings. However, the ultimate purpose of real earnings manipulation is to influence the reported earnings. Fifth, the extent of earnings manipulation (i.e. how far would earnings manipulation go) totally depends on the level of reported earnings desired by management.

Earnings manipulation has three different forms: earnings management, earnings fraud, and creative accounting. The three are exhaustive and mutually exclusive. Earnings manipulation through exercising the accounting discretion accorded by accounting standards and corporate laws is “paper earnings management”. “Real earnings management” – earnings manipulation through restructuring activities or business transactions in a legitimate way – has either a positive impact (e.g. adding a new profitable product line) or a neutral impact (e.g. accelerating the timing of sales at unchanged prices) on expected firm value.

On the other hand, earnings manipulation by violating accounting standards and/or corporate laws is “paper earnings fraud”. “Real earnings fraud” refers to the earnings manipulation through restructuring activities or business transactions in such a way that expected firm value is reduced, while the restructuring may or may not violate corporate laws and/or accounting standards. Business transactions that do not violate accounting standards or corporate laws but reduce expected firm value indicate the existence of significant defects in the accounting standards or corporate laws. For instance, some accounting standards are so sketchy as to leave too much room for manipulation. In terms of Enron case, its business transactions with related companies, though not violating GAAP or corporate laws of United States, reduced expected firm value because firm risks were increased due to considerably increased debts. Accordingly, what Enron did is real earnings fraud. Real earnings fraud might have negative impacts on firm’s expected and book value (e.g. overproduction, accelerating sales by offering reduced listed price to increase current period’s revenues at the expense of next period’s revenues), and a neutral or positive impact on firm’s book value in current period but a negative impact on expected firm value (e.g. transferring bad property to a subsidiary, bribing auditors).

Since accounting standards and corporate laws differ from country to country, under the proposed definitions, it is then possible for the same type of practice to be categorized as earnings management in one country but as earnings fraud in the other. Earnings fraud is specific to and punished by individual countries. Unless countries share the same accounting standards and corporate laws can this problem be solved.

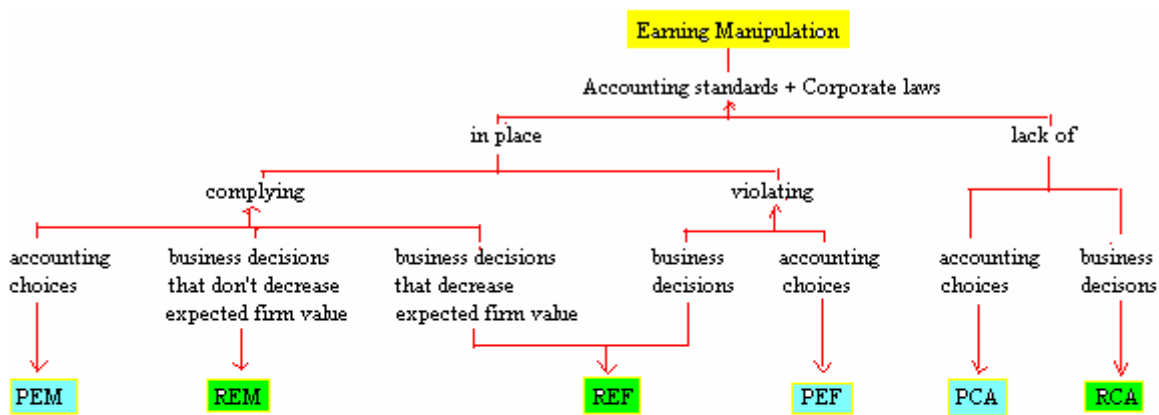
The distinction between earnings management and management fraud used to be a thin line (Brown, 1999). Under the definitions proposed above, however, the line is made relatively easier to be determined and measured:

when accounting standards or corporate laws are violated, no matter how many, paper earnings fraud is committed; the more standards and laws are violated and/or the greater amount is involved, the more material will paper earnings fraud be. The examination of the compliance of standards and laws resembles the process of auditing, and can be conducted using multiple approaches, including face-to-face interviews, questionnaires and scrutinizing notes of financial statements. The difficulty in the examination of real earnings management is the explicit determination of the impact on firm value.

Creative accounting occurs when, for example, an accounting standard is too specific to cope with

business innovations. Creative accounting is mutually exclusive with earnings management and earnings fraud, and it is neither a fraudulent nor a legitimate practice. In other words, in terms of applying accounting standards and corporate laws, there is no overlap between creative accounting and earnings management or earnings fraud. However, in terms of the impact on firm value, creative accounting overlaps with earnings management if it does not decrease expected firm value, and overlaps with earnings fraud if it does so. Creative accounting can also be performed through accounting choices or real actions; the former is “paper creative accounting”, while the latter is “real creative accounting”. As a summary, figure 1 illustrates the relationships among the various forms of earnings manipulation.

Figure 1. Relationships among the components of earnings manipulation



Where

PEM = paper earnings management

REM = real earnings management

PEF = paper earnings fraud

REF = real earnings fraud

PCA = paper creative accounting

RCA = real creative accounting

3. A REVIEW AND EVALUATION OF LITERATURE ON EARNINGS MANAGEMENT DEFINITION

There has been no clear consensus on what is earnings management in the literature (Dechow *et al.*, 1996; Messod, 2001). Although SEC sources often mention “earnings management”, none of the SEC sources explicitly defines earnings management (Dechow & Skinner, 2000). The various attempts at defining earnings management in the accounting literature can be categorized into four approaches. Defined in terms of management intent, earnings management is a purposeful intervention in the external financial reporting process, with management intent of obtaining

some private gain (Schipper, 1989; Cormier & Magnan, 1996; Bagnoli & Watts, 2000) via, for example, masking the true consequences of management’s decisions (Levitt, 1998); the form of the gain might be management benefit and/or firm’s benefit (Eighme & Cashell, 2002). On the other hand, Healy & Wahlen (1999) posit that earnings management involves managers using their judgment in financial reporting and in structuring transactions to alter financial statements so as to either mislead some shareholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers. The problem with this approach is that management intent is unobservable. No one can be certain if earnings are manipulated for management or firm’s benefit, or to mislead information users. Consequently, the unit

'earnings management' is impossible to be measured directly or operationalized accurately via attributes of reported accounting numbers.

In terms of the quality of reported earnings information, United State's former SEC Chairman Levitt defined earnings management as practices by which "earnings reports reflect the desires of management rather than the underlying financial performance of the company" (See Duncan, 2001). In other words, earnings management is the manipulation of reported earnings so that they do not accurately represent economic earnings at every point in time (Goel & Thakor, 2003). The problem with this approach is that no one knows a firm's underlying or economic earnings due to information asymmetry, making the direct measurement of earnings management defined in this way impossible too.

According to Watts & Zimmerman (1990) and Evans III & Sridhar (1996), earnings management is the strategic exercise of management discretion over accounting numbers with or without restrictions. For Levitt, earnings management is to exploit an advantage of the flexibility in accounting so as to keep pace with business innovations (Levitt, 1998), namely, earnings management is a practice of creative accounting. In a word, earnings management is neither a legitimate nor an illegal practice so long as management discretion over accounting numbers or accounting flexibility is exercised. This approach of defining earnings management in terms of management reporting discretion is also empirically problematic, because there is unlikely to be a control group of "earnings management": managers of all firms are expected to use their discretion of reporting if they are rational and opportunistic.

Definitions of earnings management in terms of accounting standard application fall into two major types. First, earnings management is the practice of firms' misapplying accounting standards (e.g. U.S. SEC Chief Accountant Lynn Turner²; Johnson, 1999). To misapply is to use wrongly or for a wrong purpose (Procter, 1987). Thus, earnings management to Turner and Johnson is the practice of using accounting standards (i.e. within the bounds of accounting standards, or legitimate) wrongly or for a wrong purpose – consistent with the approach of defining earnings management in terms of management intent. A related view is held by Dechow & Skinner (2000). They identify three practices: (a) fraudulent accounting practices, (b) earnings management, and (c) the legitimate exercise of accounting discretion. They explained that both practices (b) and (c) are within the constraints of accounting standards, what distinguishes the two is management intent: if the practice is meant to deceive, it is (b), otherwise it is (c). These authors

regard earnings management as legitimate practices but with management intent to deceive information users. However, a legitimate practice has nothing to be accused of, no matter what the intent might be, not to mention that intent is unobservable.

As for the second type of definition from this approach, earnings management is the process of taking deliberate steps within the bounds of accounting standards so as to bring reported earnings to a desired level (Brown, 1999). As can be seen, this definition is consistent with what has been discussed about paper earnings management in the section above. Defined in this way, paper earnings management is empirically measurable. To sum up, the four approaches under which earnings management has been defined indicate why earnings are manipulated, what has been manipulated, how earnings are manipulated, and the legitimacy of the way to manipulate earnings respectively.

To assess the existence of earnings management for empirical researches, three major approaches have been used in the literature: accruals (i.e. the difference between reported earnings and cash flows from operations), earnings distribution, and return on assets ratio. All the three represent some of the possible consequences of earnings management. Healy & Wahlen (1999) believe that unexpected accruals (i.e. the residual item after total accruals are regressed on variables that are indicators for normal accruals and gross fixed assets) are the evidence of earnings management, because unexpected accruals are the unexplained part of total accruals. On the other hand, Messod (2001) used specific accruals (e.g. the provision for bad debt; accruals in specific sectors, such as the claim loss reserve in the insurance industry) to assess earnings management. However, the accruals approach is problematic for at least three reasons. First, although discretionary accruals might be affected by managerial choices, the relationship between earnings management and unexpected accruals can be no more than an assumption due to information asymmetry; namely, the two are not necessarily of cause-and-effect relationship. Second, unexpected accruals are a noisy variable. Third, the accrual approach is not exhaustive or inclusive, because accruals are only one type of the objects that can be manipulated, other objects include, for example, product costs; and unexpected or specific accruals represent, if may, the existence of paper earnings manipulation only.

Goel & Thakor (2003) measures earnings management with earnings distribution: if earnings distribution over various accounting periods is smooth, then earnings in the firms had been managed. This approach is problematic mainly for two reasons. First, smooth earnings distribution is not necessarily caused by earnings management, it might represent actual performance. Second, earnings distribution is also a noisy variable, because earnings manipulation is only

² See Magrath & Weld (2002).

one of multiple causes of smooth earnings distribution. Balsam et al. (1995) uses return on assets (i.e. net income / average total assets) to assess earnings management. Being a noisy variable, the ratio is not a necessary cause of earnings management either. In sum, the indicators used to measure earnings management so far are not representative enough to produce reliable empirical results. Instead, they represent possible consequences of earnings manipulation rather than those of earnings management alone.

Other problems in the researches on earnings management include earnings management being observed under various other names, such as “earnings manipulation”, “apparent extreme earnings manipulation” (Marin et al., 2002), “window dressing action” (Dutta & Giger, 2002), or “within-GAAP manipulation” (Dechow et al., 1996); and the term “earnings management” being used to represent different things by different authors. In all, earnings management has been used in the accounting literature to represent five different concepts: earnings manipulation (e.g. Healy & Wahlen, 1999), paper earnings manipulation (e.g. Watts & Zimmerman, 1990), paper earnings fraud (e.g. Marin et al., 2002), paper earnings management (e.g. Dechow & Skinner, 2000), and creative accounting (Levitt, 1998). An explanation to this phenomenon is a lack of consensus on if earnings management is different from earnings manipulation, if earnings management is fraudulent, and if there is a difference between paper earnings management and real earnings management. As a result, these problems have provoked the confusion in the research on earnings management.

In the literature, earnings management is often regarded as the synonym of earnings manipulation, and sometimes as an alternative of earnings fraud. However, the attempt of distinguishing earnings management from earnings manipulation and earnings fraud has been found in the literature. Such attempts may be categorized from the perspective of the number of items identified. In the two-item approach, earnings management is distinguished from “earnings manipulation” (Dechow et al., 1996)³, “truthful reporting” (Evans III & Sridhar, 1996), “fraud” (Brown, 1999), “fraudulent financial reporting” (Landsittel, 2000), or “outright fraudulent financial reporting” (Marin et al., 2002). In the three-item approach, earnings management is distinguished from “fraudulent accounting practices” and “legitimate exercise of accounting discretion” (Dechow & Skinner, 2000), or “fraud” and “accounting irregularities” (Magrath & Weld, 2002).

Real earnings manipulation has often been overlooked in the literature. To Schipper, “real earnings management” is something that is “accomplished by timing investment or financing decisions to alter reported earnings or some subset of it”. (Schipper, 1989) Other works contributed to the research on real earnings manipulation include Jiambalvo (1996), Goel & Thakor (2003) and Roychowdhury (2003), the most constructive one being Roychowdhury (2003).

4. CONCLUDING REMARKS

To sum up, earnings manipulation is management’s action taken to bring about a desired level of reported earnings. When earnings manipulation is performed through exercising the discretion accorded by accounting standards and corporate laws, and/or structuring activities in such a way that expected firm value is not affected negatively, it is earnings management, otherwise it is earnings fraud. The paper contributes to the theoretical framework of earnings management by developing an explicit and vigorous definition of earnings management, specifying different forms of earnings manipulation, and distinguishing earnings management from earnings manipulation, earnings fraud and creative accounting.

There are now too many contradictorily distinct explanations for earnings management (Arya *et al.*, 1998), and it has been ambiguous – both academically and practically – if earnings management is a fraud. The consequences of the inconsistency or lack of the consensus include unreliable testing of the theories of earnings management with field or laboratory data (Arya *et al.*, 1998), conflicting interpretations of empirical evidence on earnings management (Messod, 2001), apparent inconsistency in empirical results, and irreproducibility of the same research by other equally trained observers. An explanation to the continuous emerge of new definitions of earnings management and the lack of consensus on the definition is that people find previous definitions imperfect in some aspects, and want to do something to improve the situation. Yet, up to now, the definitions of earnings management are still unscientific mainly because the unit has to be indirectly measured – measures of possible and non-exclusive consequences of earnings management are used instead. As a result, the measures of earnings management cannot help to be noisy, impeding reliable empirical testing of the theories of earnings management. The results of this research offer a solution to the problem. With the definitions proposed in this research, the unit of earnings management can be directly measured: earnings management occurs when every accounting standard and corporate law is complied with; when any accounting standard or corporate law is violated, earnings fraud is then committed; the degree of earnings

³ Though realising that earnings management is different from earnings manipulation, the authors did not explain the difference in-between.

fraud increases with an increase in the number of standards and laws violated.

The need to precisely define earnings management arises also because it concerns many other parties including regulators, firms and investors. If earnings legitimately manipulated in the ordinary course of business and earnings fraudulently manipulated are not clearly distinguished first, it is impossible for the SEC to initiate and justify its enforcement actions. When earnings management is indicated by some phenomena that are the possible consequences of earnings fraud, earnings management and real performance, it is hard for SEC to determine if firm commits earnings fraud.

With an ambiguous definition of earnings management, firms that practice earnings management might be treated in the same manner as those that practice earnings fraud, provoking wasteful conflicts and unnecessary disputes between firms and regulatory bodies, and indirectly encouraging earnings fraud.

In general, everything has two sides. In terms of earnings manipulation, earnings fraud is its negative side while earnings management is its positive side. Earnings management is firms' strategic tool for maximizing firm value and reducing risks. A systematic and scientific study of the value-adding functions of earnings management is presented in Ning (2005).

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