

IS EARNINGS MANAGEMENT AFFECTED BY INTERNATIONAL FINANCIAL REPORTING STANDARDS?

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Abstract: *International Financial Reporting Standards (IFRS) are considered to be instrumental for meeting requirements of comparability, relevance and transparency when examining companies' results globally. The idea of IFRS is rational and reasonable, though opponents, who disagree that IFRS might provide some benefit, exist. The information asymmetry between managers and stakeholders (especially investors) could potentially be decreased by using one set of accounting standards to ensure that all necessary information is available for decision making. However, managers might affect the reporting performance for their benefits.*

This paper examines the relationship between a single set of accounting standards—in this case IFRS—and earnings management. When looking at this relationship, the following question presents itself: can IFRS improve manager behaviour and decrease activities of earnings management? While some research (e.g. [10], [31], [23]) related to this topic has been conducted, results have not been conclusive. Some of the research has appeared to confirm the importance of IFRS, while other studies have demonstrated that mandatory IFRS adoption increases earnings management. IFRS may indeed influence earnings management, but not as an isolated issue. This relationship presents a fertile field for future research.

Keywords: *IFRS, Accounting standards, Earnings management, Income smoothing, Discretionary accruals.*

JEL Classification: *M41.*

Introduction

Transparency and comparability between reported financial positions and performance metrics of companies throughout the world are increasing, and International Financial Reporting Standards (IFRS) issued by International Accounting Standards Board (IASB) in London have played an important role in this shift. IFRS represent the international accounting standard—a standard with a growing influence around the globe. While the aims of IFRS appear useful and effective, opponents of the standards argue that IFRS provide little or no benefit.

Reported financial results, and the development of these results, are vitally important for both present shareholders and potential investors. The information asymmetry between managers and other users of financial statements could be decreased by using one set of accounting standards, as this would ensure that all necessary information for decision making is available. Managers, however, may try to mislead users of financial statements by increasing the company's earnings—a manipulation that would make them appear more successful. This behaviour, termed earnings management, can affect a firm's performance in a variety of ways.

This paper first presents a review of relevant research made in earnings management itself, and then analyses studies that examine IFRS influence on earnings management.

IFRS play a significant role within the field of accounting regulation, with their purpose being to ensure that users of financial statements receive high quality, necessary information. Beginning in 2005, IFRS have been mandatory for all European listed companies, and the goal of this paper is to review relevant research studies in order to determine whether or not these standards could reduce earnings management and—in doing so—enhance the quality of information available to stakeholders.

1 Methodology

The methodology of this paper involved searching relevant research studies that included different methods of detecting and measuring earnings management, and also examining IFRS impact on earnings management. A variety of models (see subsection 3.2.) of detecting earnings management exist, and research results broadly confirm the existence of earnings management. Relevant studies, which include both research of earnings management and research about IFRS impact into earnings management, are also evaluated within this paper.

Earnings management is an issue that has been researched for several decades in the United States of America, and for this reason most significant studies addressed U.S. environments. Today, earnings management has become a popular topic both in Europe and around the globe. Important research studies on earnings management, as well as models that detect and measure its existence, are evaluated below.

2 Problem solving

IFRS represent one set of accounting standards that is used worldwide to enhance transparency and comparability of reported financial statements. Because an increase in information quality is their “only” target, it is necessary to identify how this increase impacts manager behaviour in regard to reported earnings. Managers might do decision only to increase firm’s financial health because reporting results do not intent to be under budget. One popular definition of earnings management is given by Healy and Walhen [22]:

“Earnings management occurs when managers use judgement in financial reporting and in structuring transaction to alter reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers”.

There are a variety of specifications (e.g. see Gunny in subsection 3.1.) as to what constitutes earnings management, as well as different methods for both carrying it out and for detecting and determining its existence. Nevertheless, detecting and measuring earnings management is not a simple issue, and therefore results and intents may vary. The key question is: Can one worldwide set of standards ensure comparability of statements while also preventing earnings management?

3 Discussion on Earnings Management

3.1 Methods of Earnings Management

Real earnings management occurs when managers undertake actions that deviate from the first best practice reported earnings [20]. Real earnings management is not attained by accounting methods, but instead through decisions that affect specific accounting operations such as Research and Development expenses (R&D expenses) and Selling, General and Administrative expenses (SG&A expenses). These decisions can include the

postponement or elimination of investments in fixed assets and the timing at which assets are sold. This can occur when managers wish to enhance operation income, avoid reported losses, etc.

R&D expenses play a considerable role in earnings management, largely because IFRS require specific criteria to be met for a company to capitalize on some R&D expenses. According to IAS 38, research expenditure is always charged as an expense when it is incurred, and development expenses can be capitalized only after they meet prescribed requirements (see paragraph 57 IAS 38). Development expense decisions create space within earnings management to cut R&D investments and enhance earnings in the current period. According to Dechow et al. [11], CEOs spend relatively less on R&D during their final years in office in order to enhance their short-term financial performance. SG&A expenses represent similar opportunities to mislead stakeholders, as they affect reported earnings. Intangible assets (such as customer database, brands etc.) can be recognized only when they meet prescribed criteria (e.g. intended for future sale) under IAS 38 Intangible Assets. Accounting of fixed assets also seems to be fertile ground for earnings management practices. The selling time of non-current assets affects the reported result because the gains from selling fixed assets are presented in income statements at time of sale. Managers sell long-term assets to avoid financial losses [6]. There is empirical evidence that earnings management exists. When attempting to detect and measure earnings management, we must consider all methods together in order to avoid having only a limited picture of the entire task.

3.2 Detecting and Measuring Earnings Management

As was mentioned above, there are a variety of ways in which the manipulation of reported results can occur, all of which must be taken into account when determining whether or not managers engage in earnings management. Detecting earnings management is not a simple task. According to Burgstahler et al. [7], recent studies (e.g. [27], [22], [13]) use four different proxies obtain a range of earnings management activities:

- “The tendency of firm to avoid small losses,
- the magnitude of total accruals,
- the smoothness of earnings relative to cash flows,
- the correlation of accounting accruals and operating cash flow.”

While these proxies are not perfect, Lang et al. [26] or Wysocki [30] state that they behave in an acceptable fashion. The first method, *the tendency of firm to avoid small losses*, is based upon the premise of hiding financial losses, and is calculated as income before extraordinary items (IBEX) scaled by lagged total assets or total sales (e.g. [24]). Because the mathematical formula for this method contains only three variables, the method tends to be relatively simple.

The test for *magnitude of total non-discretionary and discretionary accruals* is most typically used in academic research to detect earnings management (e.g. [7]). The base model was made by Healy [21] but does not incorporate non-discretionary accruals. According to Healy [21], total accruals (ACC) contain both discretionary (DA) and non-discretionary (NA) components and are estimated by the difference between reported accounting earnings and cash flow from operations.

$$ACC_t = NA_t + DA_t \quad (1)$$

$$ACC_t = -DEP_t + XI_t \times D_1 + \Delta AR_t + \Delta INV_t - \Delta AP_t - \{\Delta TP_t + D_t\} \times D_2 \quad (2)$$

Where:

- DEP_t = depreciation in year t ;
- XI_t = extraordinary items in year t ;
- ΔAR_t = account receivable in year t less accounts receivable in year $t-1$;
- ΔINV_t = inventory in year t less inventory in year $t-1$;
- ΔAP_t = accounts payable in year t less accounts payable in year $t-1$;
- ΔTP_t = income taxes payable in year t less income taxes payable in year $t-1$;
- $D1$ = 1 if bonus plan earnings are defined after extraordinary items,
= 0 if bonus plan earnings are defined before extraordinary items.
- $D2$ = 1 if bonus plan earnings are defined after income taxes,
= 0 if bonus plan earnings are defined before income taxes.

The limitation of the Healy model is that it does not incorporate any determinants of non-discretionary accruals. Jennifer Jones authored the model which considers the non-discretionary accruals in the year 1991. The changes in revenues and the level of gross property, plant and equipment (PPE) were determinants of non-discretionary accruals. Jones' model from 1991 was modified, and a later version provides more powerful tests of earnings management [12]. There are other relevant models that measure earnings management (e.g. [14]), but they essentially follow the base model with additional modifications in variables. The existing models that measure accruals-based management include both the simple one in which discretionary accruals are measured as total accruals and the more sophisticated one where accruals are separated into discretionary and non-discretionary components [12].

An important, innovative step forward in measuring earnings management was made by Dechow et al. [15] in the paper "Detection of Earnings Management: A New Approach," which introduced a model with improved specification and test power. Their new approach exploited an underlying characteristic of accrual-based earnings management that was not considered in previous research. The paper introduced a flexible procedure, and addressed problems associated with common text for earnings management by incorporating prior research concerning the reversal of discretionary accruals in tests. Using this procedure, the researchers identified the periods in which accruals were predicted to be managed and when they were predicted to be reversed. They were able to increase the test's estimation power to roughly 40% in typical earnings management studies. Furthermore, their model represents an important move forward in that it presents a dynamic process, and it relies on researchers to know exactly know the periods in accruals are managed and reversed [17].

Earnings smoothing involves intertemporal smoothing of reported earnings relative to economic earnings, with the purpose of making earnings look less variable over time [18]. If managers can choose which of two periods to recognize certain income, they might prefer the choice that expected to result in a smoother income stream [29].

4 IFRS Affect into Earnings Management

According to Paul Pacter [28], a former board member, IFRS profiles are completed for 122 jurisdictions including G20 countries. 101 jurisdictions (in total 83 %) require IFRS for most or all domestic listed companies. Ten of the remaining 21 jurisdictions permit IFRS for at least some listed companies (India, Japan), and the other jurisdictions are

in lower levels of IFRS adoption. The number of jurisdictions that have already adopted IFRS confirms the importance of the role IFRS plays. As a single set of global accounting standards, its adoption is leading to higher transparency and comparability of financial information¹.

Methods for detecting and measuring earnings management were mentioned in subsection 3.2. In order to determine the influence of IFRS on earnings management, a method that was used for a period both before and after the adoption of IFRS was examined. Research was conducted for both periods, and the results were compared. Some other empirical studies present more methods [8].

While the goals of IFRS are obvious, the actual benefit that is attained from mandatory adoption of IFRS is a subject of discussion among researchers and other relevant professionals. There are advantages of IFRS, as they contribute positively to the quality of reported results, but contrary arguments also exist. Many empirical studies (e.g. [24], [8]) have been published regarding mandatory IFRS adoption and the ways in which it affects earnings management improvements.

One supporting argument for IFRS is that a universal set of standards results in a lower number of discrepancies than could be achieved by a system containing many national GAAP (e.g. [16]). Under Ewert and Wagenhofer, tighter accounting regulation might improve reporting quality and decrease earnings management. Conversely, Ball [2], [3] argues that one single set of standards might not adequately account for the differences in national institutional features.

The requirement to maintain comparability between companies abroad is important for both stakeholders and potential investors. Armstrong et al. [1] assume that IFRS reduce costs for investors to evaluate companies across different countries and markets. Barth et al. [4] suggest that the cost to a country's investors is reduced when two local GAAP become more similar because the investors become accounting experts for another country. Adopting IFRS might reduce costs of international cross-border comparison, and it could decrease the cost of analysis for companies across the border [3]. According to Jeanjean and Stolowy [24], "even if the quality of corporate reporting does not improve, it is possible that financial information will become more useful to investors and a common set of accounting standards could help investors to differentiate between lower and higher quality firms, which in turn could reduce information asymmetries among investor and/or lower estimation risk". Zeghal et al. [32] examined whether the quality of financial reporting has increased or decreased after mandatory IFRS adoption within 15 European countries. Their results show that mandatory IFRS adoption leads to positive accounting-based changes, but that the market-based changes associated with IFRS are less favorable. Their other research [31] focused on a sample of 353 listed French companies with similar issues during the period 2003-2006. They emphasized the significant role of corporate finance in the enforcement process of IFRS, and results showed a positive contribution of IFRS. This was attributed to the fact that, assuming good corporate governance, mandatory IFRS adoption by French companies reduced the use of discretionary accruals. "What is the relationship between accounting standards and corporate governance? And what if the effect of IFRS on earnings management would not be so clear without good corporate governance?"

¹ Financial Accounting Standard Board (FASB) as a issuer of United States Generally Accounting Accepted Principles (US GAAP) together with IASB work on convergence of US GAAP and IFRS.

Regardless of IFRS research results, there are elements of a continuously changing worldwide economy that pose a threat to the standards' stated goals. Ball et al. [2] show only minor effects of accounting standards on reported quality. The research results argue that application of IFRS involves both significant judgment and the use of private information. The incentive of auditors or managers has greater influence than accounting standards. This and other arguments cast doubt on whether the simple adjustment and novelization of accounting standards can make a firm's financial statements more comparable and improve manager behavior. Houque et al. [23], in a study published at the University of Illinois, highlights the importance of investor protection in the field of financial reporting and strengthens the idea that higher quality earnings can be found within countries with strong investor protection regimes.

IFRS have only a limited impact on earnings management, and the net effect of their adoption is uncertain. Firstly, there are arguments that accounting standards strongly affect reported earnings. Also, a large number of studies fail to confirm IFRS's importance due to the existence of other explanatory factors (institutional factors or incentives) within economies. Due to increasing global connectedness, the mandatory transition to IFRS will lead to a harmonization of accounting standards across countries. Research conducted by Barth et al. [5] showed a reduction of earnings management, higher value relevance, and a more timely recognition of losses after reported financial statements under IFRS than under local GAAP.

As above evidence makes clear, earnings management itself represents a productive area of research. A variety of methods for detecting and measuring earnings management have been developed throughout history, but they are still imperfect, and there is room for improvement. IFRS were created with the goal of enhancing the quality of reported earnings in financial statements, and the importance of these standards, coupled with the popularity of earnings management in research, means that there are many possibilities for future empirical research and for improving statistical models.

Conclusion

An increased number of international businesses, along with increased cooperation across different markets, means that countries require a transparent environment that allows for easy comparison between financial statements. IFRS might be one instrument for improvement, as their purpose is to enhance both the quality of reported financial statements and the comparability and transparency of presented information. IFRS influence on earnings management represents one approach to evaluate and quantify the extent to which the standards are meeting their goals. In order to detect and measure the effect of IFRS, research must examine periods both before and after IFRS adoption. Prior research on this topic has yielded different results. While some research confirms that IFRS exert a positive influence on earnings management, some research finds that the effects are mostly negative. To summarize this research, IFRS might enhance the quality of reported earnings only if certain assumptions are met. IFRS themselves would not ensure higher transparency and comparability across companies worldwide, for there are many other factors (e.g. corporate governance, investor protection) that have indisputable influence as well. Still, IFRS may enhance the quality of reported earnings in certain circumstances.

Nevertheless, studies focusing on the impact of IFRS on earnings management have some limitations—limitations that can largely be attributed both to the short time horizon following the adoption of IFRS (e.g. [24]) and also to the limitations of statistical models

themselves, e.g. the behaviour of discretionary accruals is difficult to estimate (e.g. [8]). This paper contributes to the current debate over the effectiveness of IFRS and its ability to increase the quality, comparability and relevance of accounting information reported in financial statements. The relatively small amount of studies that have been conducted on IFRS following its adoption period, coupled with the importance of the relationship between IFRS and earnings management, means that there are many opportunities for future academic research in this area. Future research could concentrate on attributes such as earnings volatility, timelines, etc.

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