

# The Impact of Changes in Accounting Standards on Earnings Management Empirical Research from 2003-2014

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## ABSTRACT

This study considers the question whether the changes in Accounting Standards has led to companies making less use of earnings management. The paper is an attempt to investigate whether the application of high-quality standards like International Financial Reporting Standards (IFRS) is related to high financial reporting quality. This study addresses this issue empirically. Furthermore, this research examines whether German companies that have applied IFRS have less earnings management compared to German companies that report according to the German Generally Accepted Accounting Principles (GGAAP). The sample, consisting of two equally large listed companies in Germany (Südzucker Group and Henkel Group) from 2003-2014. The study suggests that IFRS-adopters show different earnings management performance compared to companies reporting under German GAAP. This finding contributes to the discussion on whether high quality standards are appropriate and operational in countries with weak investor protection rights. The result shows that adopters of IFRS in Germany can be related with less use of earnings management as a result of changes in accounting standards. This result is contradictory with previous research that was done by Van Tendeloo and Vanstraelen, (2005), and consistent with the previous research conducted by Ball et al. (2003).

**KEY WORDS:** Accounting Standards, Earnings Management, German GAAP, Financial Reporting Quality, Investors.

## 1. INTRODUCTION

This Previous research provides evidence that the extent of earnings management is on average higher in code-law countries with low investor protection rights, compared to common-law countries with high investor protection rights (Ball et al. 2003). Hence, to assess whether companies that report under International Financial Reporting Standards (IFRS) can be related with

higher earnings quality, we focused on Germany, which is a code-law country with relatively low investor protection rights (Li, 2010). Moreover, a relatively large number of German companies have already voluntarily chosen to adopt IFRS prior to 2005 instead of using Generally Accepted Accounting Principle (GAAP) (Van Tendeloo and Vanstraelen, 2005).

The current study focuses on the legal and regulatory aspects. For German listed companies it is required since 2005 that the annual report be drawn up on the basis of the IFRS.

The problem of the study can be formulated in the following questions:

1. What could be the impact of changes in accounting standards on earnings management?
2. Is there difference between IFRS-adopters of earnings management compared to companies that report under German GAAP?

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The requirement for German listed companies to report from the year 2005 onwards according to IFRS has had the necessary impact in preparing the financial statements. This paper mainly focuses on the balance sheet item "provisions". Examining whether the changes in regulations led to companies making less use of management of earnings. Based on the above research questions, the following hypotheses are formulated:

1. Under former GAAP's listed companies applied more earnings management.
2. After adoption of the IFRS, listed companies applied less earnings management.

The paper organized as follows: Section 2 presents the conceptual framework. Section 3 shows the methodology of the study which point to the sample and data analysis. Section 4 presents the results and data analysis of the study and explain why the IFRS - adopters show different earnings management performance compared to companies reporting under German GAAP. Then, moreover, the study will compare the IFRS regulatory with German GAAP regulatory and will highlight the main differences. Section 5 shows the empirical overview on earnings management and accounting standards. Finally, section 6 presents the conclusions and recommendations for further research.

## 2. CONCEPTUAL FRAMEWORK

### 2.1 The German Accounting System

Ball et al. (2003) classified Germany as a code-law country with weak investor protection rights. A good overview of the German accounting system is provided by Harris et al. (1994), Ball et al. (2000) and Macharzina and Langer (2002). The purposes of the German accounting system are to preserve equity, protect creditors and facilitate the computation of taxable income. Guenther and Young (2000) argue that in countries where there is a conformity between financial and tax accounting rules 'financial accounting information may differ from underlying economic activities because firms attempt to minimize taxable income'. Managers are given a large number of options regarding inclusion and valuation of items in the balance sheet and the opportunity to control net income. German accounting is in general rather conservative. This tendency towards conservative reporting is protected by law, avoiding management from holding more than half of net income for the year, and strong labour unions, with substantial representations on the supervisory boards, strengthening their demands when reported earnings are higher. However, while German accounting is widely presumed to be conservative because of the reduction of reported income during good years, German managers also tend to increase reported income in bad years. German firms can thus be

expected to engage particularly in a specific form of earnings management, called earnings smoothing, to reduce the volatility of reported earnings (Van Tendeloo and Vanstraelen, 2005).

Earnings smoothing is assisted through the permitted use of hidden assets. This can be created by building up unjustified provisions, recognizing excessive depreciation of assets or setting aside certain profits in tax-free reserves. In this way, a company can build up hidden reserves, which are then charged against income, when profits are high and release them in periods of losses or low earnings (Li, 2010). As in other countries in continental Europe, more and more firms are looking for public equity financing. Hence, the ownership and financing of these companies are changing and investors are becoming a more important user group of financial reporting in Germany. However, potential investors consider the discretion in German standards, which allows firms to manage income using large 'silent reserves', and the influence of tax avoidance strategies as too large and criticize the lack of detailed disclosures designed to satisfy the information needs of investors and financial analysts (Van Tendeloo and Vanstraelen, 2005).

### 2.2 International Financial Reporting Standards (IFRS)

The abbreviation IFRS stands for International Financial Reporting Standards. IFRS is an accounting standard for the preparation of annual reports of companies. The IFRS includes International Accounting Standards (IAS), which have been further developed, and a number of IFRS norms. The International Accounting Standards Board (IASB) keeps track of whether the rules are properly observed. The major difference between IFRS and national legislation is in the way of reporting. The IFRS reporting is based on 'fair value', this means that reporting is against current values.

Also, the introduction of IFRS led to a better global comparability of financial statements. Every analyst and investor can easily compare financial statement from different countries (Hoogendoorn, 2006).

### 2.3 Legislation and Earnings Management

It may well be said that a lot has changed for listed companies in 2005 when they were obliged to report under IFRS. The differences between national standards and IFRS mainly relate to pensions, goodwill, income taxes, provisions, financial instruments and share-based payments (Hoogendoorn 2006). But also, other balance sheet items are processed differently under IFRS. It is often difficult to determine the fair value of a balance sheet item, which paves the earnings management. It is pretty easy for managers to value a balance sheet item

slightly higher (or lower). It is not realistic to compare regulations within German GAAP with comparable regulations in IFRS at each balance sheet item and to investigate whether under the new legislation the ability to influence results of the item has become easier or harder. In this sub section, firstly the regulations concerning provisions item will be discussed. The criterion "reliable estimate" means that a provision may only be included if the magnitude of the obligation can reliably be determined. The determination of magnitude of the provision is made by the method (IAS 37.36, RJ 252.301). In determining the magnitude of the provision, one should take into account the risks and uncertainties associated with the provision. "Best estimate" means the amount that a rationally acting legal entity would pay to take over the obligation, or to transfer it to a third party. Because the determination of the magnitude of the provision brings about many uncertainties, the item "provisions" features a perfect item for applying management of earnings.

## 2.4 IFRS and German Legislation

In this section we will look at which points the regulations concerning provisions changed after listed companies were required in 2005 to report under IFRS. The first difference is found in the valuation of provisions. Under previous law and regulations, a company had the choice to value either at nominal value or at present value. Under IFRS it should be measured at present value if the time value is material. At this point the IFRS is stricter. There are also differences between the previous legislation and IFRS regarding expenditure on major maintenance, the provision for restructuring reorganizational costs, the provision for restoration costs, the provision for disability insurance costs and regarding changes in the provision for restoration costs.

On all these issues, IFRS is stricter than the former legislation. In a stricter way of reporting, it can be expected that the use of earnings management is more difficult. Under former law it is permissible to make provisions in good times. In bad times, the company has a buffer on hand to equalize profits.

We expect therefore that the research in this section will reveal that German listed firms have taken greater provisions in the years they could still report under German legislation (before 2005), than if they would have had to apply the IFRS rules.

This view is descriptive; the highest paid executives may be the ones who make the greatest contribution to firm value. For example, (Chang, Dasgupta and Hilary 2010) find that, in a broad cross-section of firms, the level of compensation is positively correlated with the performance of CEO's. Although compensation of sales executives is likely to mainly reflect their capacity to generate sales, the compensation may also reflect other

dimensions of the job such as the quality of sales reporting. If this view is empirically descriptive, higher paid sales executives may generate better quality sales reports if these executives have the capacity to affect the quality of financial statements and if it is in the best interest of their employers to provide high quality financial reporting. In contrast to this "pay-for-transparency" view, the agency theory predicts that sales executives behave opportunistically and manipulate the reporting to maximize their compensation, their bonus in particular.

Consistent with this view, Healy (1985) suggests that managers choose current discretionary accruals to maximize both the current period's bonus and the expected value of next period's bonus. The value of this argument has been discussed in the subsequent literature (see Fields et al. (2001), for a review) but again most of the research has focused on CEO's behaviour. If the agency theory is empirically descriptive in my setting, highest paid managers may be the most successful manipulators.

## Potential types of Earnings Management

So far discussion explains the phenomenon earnings management and what the motives of managers to manage earnings are and how accruals are managed. This section discusses the way forward how managers manage their earnings. According to Arthur Levitt (1998), the former president of the Security Exchange Commission (SEC), there are several potential forms of earnings management.

### Cookie Jar Reserves

The first category of earnings management is so called "cookie jars reserves". An accounting practice, in which a company uses generous reserves from good years against losses that might be incurred in bad years. Cookie jar accounting is a sign of misleading accounting practices. This gives the sense of "income smoothing", because earnings are understated in good years and overstated in bad years.

Several studies have looked at reasons why managers choose to equalize income. Healy (1985) indicates as one potential cause for managers that deform the earnings is to earn their rewards, while other researchers believe that managers use income smoothing to not lose their jobs. (Fudenberg and Tirole 1995, Arya et al 1998).

### Income Smoothing Method

There are also studies that find "income smoothing as a method, managers can use to give information about future earnings. Kirschenheiter and Melumad (2002) give as an explanation, for "income smoothing" that investors on the one hand, can deduct from the reported figures how the future cash flows will be, while on the

other hand, the fluctuation of the figures leads to declining confidence in investors.

There is evidence that German firms engage in substantial income smoothing (e.g., Ball et al. 2003; Leuz et al. 2003). On the one hand, this approach is limiting in the sense that it only reports on a subset of earnings management, namely earnings smoothing behaviour. On the other hand, it centers the research on the best documented and probably most prevalent financial accounting issue. It thus provides evidence for an earnings management activity, which is central to German reporting.

The strategy of manipulating a company's income statement to make poor results look even worse. The *big bath* is often implemented in a bad year to enhance artificially next year's earnings. The big rise in earnings might result in a larger bonus for executives. New CEO's sometimes use the *big bath* so they can blame the company's poor performance on the previous CEO and take credit for the next year's improvements. For example, if a CEO concludes that the minimum earnings targets can't be made in a given year, he/she will have an incentive to move earnings from the present to the future since the CEO's compensation doesn't change regardless if he/she misses the targets by a little or a lot. Dechev et al. (2012), in interviews with several CFOs, reported that accounting for acquisitions was a common definition of earnings management:

*"acquisitions accounting would be the biggest area where I've seen some CFO's taking advantage. I have seen acquisitions used to establish numerous balance sheet items and those provide huge opportunities in the future to manage the P&L. They would set up provisions that are always worth more than they were set up for"*.

### 3. METHODOLOGY

#### 3.1 Sample and Data Analysis

The sample involves all listed firms in Germany for the years where necessary data are available on the data stream of the Thomson ONE Banker DataStream, which contains company accounts of all listed firms. The sample contains 425 firm-year observations relating to the period (2003–2014). Considering the difference of IFRS-adopters which present different earnings management performance compared to companies reporting under German GAAP. The financial statements have been collected for German listed companies covered by the study sample (Balance sheet and a list of income and cash flows statement) for the period between the years 2003-2014.

#### 3.2 Comparable study

We take the provision items from two equally large listed companies in Germany (Südzucker Group and

Henkel Group) from before the year 2005 and compare them with the annual reports of these companies after 2005 in order to get a clear picture about the possibilities to apply earnings management before and after IFRS. On the balance sheets the provision items comprises:

- Pensions and other related payments,
- Deferred tax liabilities,
- Restructuring provisions
- Other provisions

In this study, only the values of the other provisions and restructuring provisions are included. The reason for this is that precisely in these forms of provisions earnings management is applied. The restructuring provisions and other provisions are used as a 'cookie jar'. In good years, with great profit, the jar is being filled and in the years of downturn, the jar is being emptied. As a result, the profit is equalized.

## 4. RESEARCH FINDINGS AND DATA ANALYSIS

Based on the data obtained from annual reports of German listed companies, we will present an analysis for period in which the annual reports of (2003-2005) have been made according to German legalization, while the annual reports of (2006-2008), (2009- 2011) and (2012-2014) have been made according to the IFRS.

### 4.1 Südzucker Group

**TABLE 4.1**  
Consolidated Balance Sheet (in million EUR) For period (2003-2014)

Items	GAAP 2003- 2005	IFRS 2006- 2008	IFRS 2009- 2011	IFRS 2012- 2014
Restructuring		13.4	(32.6)	34.6
Other	1,642	379.1	393.0	395.8
Current provisions	-	-	415.4	409.6
Non-Current provision	-	-	200.3	222.6
Total	1,642	392,5	1006.1	662.6
Net Profit	307.3	357.5	305	(246.0)

Source: Researcher, depending on data taken from sources of the study from Appendix 2

On the balance of Südzucker from the year 2005, the item provisions separated into non-current and current provisions. The following parts are included under the item provisions in the balance sheets after the year 2005: restructuring, self-insurance program, loyalty programs, and other. As shown in table 4.1 the mandatory transition in 2005 to IFRS has had the necessary impact on the net profit. The net profit over 2004 was under IFRS 1,3 billion euros higher than was determined under German GAAP.

In table 4.1 it can be seen that the net result is far from

equal. The item provisions seem not to have been used as a “cookie jar” It is obvious that in these years another form of management of earnings has been applied, namely, ‘Big Bath’. This means that in years with bad results, extra costs are added so that in the following years one can start with a clean sheet again. In the years 2004-2005 it can be seen that the total provisions amounted to € 1,642 million, while the net income is € 307.3 million. The following year, the total provisions reduced by half, while the net income was almost fivefold. This could imply that the ‘cookie jar’ that was full in the year 2005, has been used to increase the result of 2006. However, in (2006-2008), (2009-2011) and (2012-2014) the net result has increased again significantly by 2 billion. It is more obvious that it has found the right track again from 2005 onwards and has left all the trouble about the accounting scandal behind. From the Südzucker numbers one can in our opinion not deduct that the item provisions are used to manage earnings. Also based on just these numbers, it is hard to determine whether under (IFRS) it has become more difficult to manage earning the year 2005: restructuring, self-insurance program, loyalty programs, and other.

#### 4.2 Henkel Group

TABLE 4.2  
Consolidated Balance Sheet (in million EUR) For period  
(2003-2014)

Items	GAAP 2003- 2005	IFRS 2006- 2008	IFRS 2009- 2011	IFRS 2012-2014
Restructuring		154	-	-
Other	421	475	884	763
Current provisions	510	664	108	152
Non-Current provision	189	224	126	119
Total	1,516	1,517	1,118	1034
Net profit	738	770	871	390

Source: Researcher, depending on data taken from sources of the study from Appendix 3

For the Henkel- Group the provisions for restructuring and other provisions are included in the item provisions. In the annual reports of 2006, 2007 and 2008 under the provisions are also included provisions relating to preferred shares, provisions for disputed indirect taxes, juridical provisions and provisions for negative net value of an associated company. These provisions have not been included in the research while the data of different years can otherwise hardly be compared. Just as with Südzucker, also from the year 2005 the item provision is splitting into non-current and current part.

Furthermore, in the annual report of 2012 the net income of the year 2014 is given both following the directives of German legislation as following IFRS. In the table 4.2 two things are striking. Firstly, that the net

income in the years that the annual reports are made according to IFRS are higher than in the years when they were made according to the basic principles of German GAAP.

Additionally, it attracts the attention that the amount that is included on the balance sheet as ‘other provisions’ is lower from the year 2006 onward, compared to the years before. This indicates the application of earnings management. Due to the stricter rules of IFRS it has become harder to build up ‘cookie jar’ reserves under the item ‘other provisions’ causing the profit to come out higher.

It is obvious that in these years another form of earnings management has been applied, namely, ‘Big Bath’. This means that in years with bad results, extra costs are added so that in the following years one can start with a clean sheet again. In the year 2005 it can be seen that the total provisions amounted to € 1516 million, while the net income is € 738 million. The following year, the total provisions reduced by half, while the net income was almost fivefold. This could imply that the ‘cookie jar’ that was full in the year 2005, has been used to increase the result of 2006. However, in 2007 and 2008 the net result has increased again significantly by 2 billion.

#### 4.3 Generally Accepted Accounting Principle (GAAP)

Generally Accepted Accounting Principles (GAAP) have been developed by standards boards throughout the world. While accounting standards vary from country to country, the intent of GAAP is to encourage managers to record similar economic transactions in consistent ways across firms and over time.

GAAP is not so rigid that it offers managers only one choice for every recording decision. For example, within GAAP guidelines managers have several alternatives when deciding how to depreciate assets. Depreciation choice will speed up or slow down expense recognition, which in turn, will reduce or increase income. However, because accrual accounting deals with expectations of the future, GAAP is founded in conventions of conservatism and measurability to help reduce distortions that may arise from over-optimism (Wild, et al. 2007).

In a flawless world, managers would record transactions in the manner that best reflects the underlying economics of the firm. In our flawed world, many managers try to provide meaningful, if not unambiguous, financial information to the market. Others are not as candid, and still others are downright deceptive. As potential or actual shareholders and employees, it would behoove us to spend considerable time analyzing a firm’s financial reports, or at least the reports of those who have the ability to analyze financial

statements with some degree of sophistication.

TABLE 4.3

Relationship between Earnings Per- Share and Net Income

Items	2003-2005	2006-2008	2009-2011	2012-2014
<u>Henkel</u>				
EPS	-			
Net income	-	1.73	1.75	1.97
		1,738	770	871
<u>Südzucker</u>				
EPS	1.52	1.48	1.67	1.36
Net income	307	357,5	305	(246,0)

Source: Researcher, depending on data taken from sources of the study from Appendix 2,3

#### 4.4 Indicative Impact of Accounting Standards on Earnings Management

Managers have more opportunities and ways to manage earnings under local GAAP than with new IFRS-rules. See also Tables 4.1, 4.2, and 4.3. A positive relationship has emerged between earnings management on the one hand, and EPS (earnings per share) and net income on the other hand (see Table 4.3), in other words: in GAAP EPS goes down and managers have an interest to depress earnings. While under IFRS, it can be seen that, EPS rising even if net income goes down. If managers want to show good performance and keep up their image, they will use both material and moral interest, (see Table 4.3). This is reliable with result which was provided by Dichev et al. (2012), they show that CFO's have a clear preference for converging U.S. GAAP and IFRS over the outright adoption of IFRS. They show also in their survey study that in any given period about 20% of firms manage earnings and for such firms 10% of the typical EPS number is managed.

#### 5. EMPIRICAL RESEARCH OVERVIEW ON EARNINGS MANAGEMENT AND IFRS

Within the existing literature, numerous studies examine the impact of IFRS-adoption on accounting quality; e.g., Barth et al. (2008) find evidence that firms from 21 countries applying IFRS generally provide higher quality in accounting, i.e., less management of earnings, more timely loss recognition and more value relevance of accounting amounts than a matched sample of non-U.S.-firms that do not apply IFRS.

Gassen and Sellhorn (2006) show that firms which have been voluntarily adopting IFRS between 1998 and 2004 have more persistent, less predictable and more conditionally conservative earnings. However, Paananen and Lin (2008) conducted a study for German companies reporting under IFRS and found a decrease in accounting quality after the mandatory EU-adoption

in 2005. They show that this decrease is driven by the change of the IFRS-standards over time. Van Tendeloo and Vanstraelen (2005) also point to no effect of accounting standards on the properties of reported earnings by finding similar levels of management of earnings under German GAAP and IAS. On the other hand, Bartov et al. (2005) conclude that earnings are more value relevant under the international framework (i.e., IAS or US GAAP) than under German GAAP and that US GAAP earnings have similar relevance as IAS earnings after controlling for self-selection. Our result is contradictory with previous research that was done by Van Tendeloo and Vanstraelen, (2005). And consistent with the previous research conducted by Ball et al. (2003).

TABLE 5.1

Researches that found a decrease in Earnings Management due to adopting of IFRS

Author(s)	Research subject	Findings
Barth, Landsman and Lang (2008)	The accounting quality of firms pre- and post-IFRS adoption	The adoption of IFRS improves the accounting quality of firms; less earnings management.
(Daske et al., 2008, Bruggeman et al., 2009, and Li, 2010)	Mandatory IFRS Reporting around the World. How do individual investors react to global IFRS adoption? Does mandatory Adoption of International Financial Reporting Standards in the Europe Union reduce the cost equity capital?	Reduction in the cost of equity capital, following the adoption of IFRS higher quality of Financial Reporting, higher analyst, greater oversight by auditors and directors.
(Wali, 2013)	Self-interest factors in Management of Earnings Reporting in The Netherlands and Germany	The adoption of IFRS improves the accounting quality of firms; less management of earnings, increase the value of financial statement

#### 6. CONCLUSIONS AND RECOMMENDATION

The requirement for German listed companies to report from the year 2005 onwards according to IFRS has had the necessary impact in preparing the financial statements. This paper mainly focuses on the balance sheet item "provisions". Examining the question whether the changes in regulations has led to companies making less use of management of earnings. The study shows that after the obligation to apply the International Financial Reporting Standards, German listed firms have made less use of earnings management. Because of the

many principles under IFRS it is difficult for companies to apply earnings management (see Figure 1).

Research findings point out that implementation of IFRS provides a different way of earnings management compared to companies reported in accordance with generally accepted accounting principles in Germany. These findings contribute to the discussion on whether high quality standards are appropriate and operational in countries with weak investor protection rights. It is anticipated that adopters of IFRSs in Germany can be related with less use of earnings management as a result of changes in accounting standards. This result is consistent with previous research conducted by Ball et al (2003), and it is contradictory with research that was done by Van Tendeloo and Vanstraelen, (2005). Based on the results of this research we came to answer the assumptions. The following proposals are recommended for further research:

- Research in common law countries and analyze the findings of such research with findings of this research.
- Research of impact of new regulation Financial Accounting Standards Board (FASB) on earnings management performance.

## 7. REFERENCES

- Ball R., Kothari, S.P. and Robin A. (2000). The Effect of International Factors on Properties of Accounting earnings, *Journal of Accounting and Economics*, pp.1-51
- Ball, R. Robin A., Wuc, JS. (2003). Incentives versus Standards: Properties of Accounting Income in Four East Asian countries *Journal of Accounting and Economics*, p. 236
- Barth, M.E., Landsman, W.R. and M.H. Lang, 2008, International Accounting Standards and Accounting Quality, *Journal of Accounting Research*, vol. 46, no. 3, pp. 467-498.
- Bartov, E., F.A. Gul and J. Tsui, 2000. Discretionary-Accruals Models and Audit Qualifications. *Journal of Accounting and Economics*, December: 421-452.
- Chang, Yuk Ying, Sudipto Dasgupta and Gilles Hilary, (2010). "CEO Ability, Pay, and Firm Performance", *Management Science*, Forthcoming.
- Daske, H., Hail, L., Leuze, C. and R. Verdi (2008). Mandatory IFRS Reporting around the World. Early Evidence on the Economic Consequences. *Journal of Accounting Research* 46 (5): 1085-1143.
- Dechow, P. M, Sloan, R. G., Sweeney, A P. (1996). Causes and Consequences of Earnings Manipulation: An Analysis of Firm's Subject to Enforcement Actions by the SEC, *Contemporary Accounting Research*,1-36.
- Dechow, P. M., Hutton A. P., Kim J. H (2011). "Detecting Earnings Management: A New Approach".
- Dechow, P.M., R. G. Sloan. (1995). Detecting Earnings Management. *The Accounting Review* 70 (April)
- Demski, J. S., & Frimor, H. (1999). Performance Measure Garbling under Renegotiation in Multi-period Agencies. *Journal of Accounting Research*, 37, 187-214.
- Dichev, I., Graham, J., and Rajgopal, S. (2012). Earnings Quality: Evidence from the Field. Fudenberg, D., and J. Tirole (1995). A Theory of Income and Dividend Smoothing Based on Incumbency Rents, *Journal of Political Economy*, 73-93.
- Gassen, Joachim/Sellhorn, Thorsten (2006). Applying IFRS in Germany - Determinants and Consequences, in: *Betriebswirtschaftliche Forschung und Praxis*, Vol. 58, Issue 4, pp. 365-386.
- Guenther, D.A (1994). Earnings Management in Response to Corporate Tax Rate Changes, *The Accounting Review*, 230-234.
- Healy, P.M. (1985). The Effect of Bonus Schemes on Accounting Choices, *Journal of accounting and Economics*, 85-107
- Hirst, D. E. (1994). "Auditor Sensitivity to Earnings Management." *Contemporary Accounting Research* 11, 405-422.
- Hoogendoorn, M.N. (1997). Beleidsaspecten Inzake de Jaarrekening, Externe verslaggeving in theorie en praktijk, deel I, Delewel 's-Gravenhage
- Kieso, D.E., J.J. Weygandt, and T.D. Warfield. (2012). *Intermediate Accounting*. New York John Wiley and Sons, p.952
- Kirschenheiter, M., Melumad, N. (2002). Can "Big Bath" and Earnings Smoothing co-exist as Equilibrium Financial Reporting Strategies? *Journal of Accounting Research* 40, 761-796.
- Kothari, S. P., Leone A. J. and Wasley C. (2005). "Performance Matched Discretionary Accrual measures". *Journal of Accounting and Economics* 39 (1): 163-197
- Levitt, A., (1998). The Numbers Game. Remarks by Chairman of SEC, delivered at the NYU Centre for Law and Business, New York, NY, September 28, 1998 available at <http://www.sec.gov/news/speech/speecharchive/1998/spch220.txt>.
- Li, S. (2010). Does Mandatory Adoption of International Financial Reporting Standards in the Europe Union Reduce the Cost of Equity Capital? *The Accounting Review* 85 (2): 607-636.
- Paananen, Mari/Lin, Henghsiu (2009). The Development of Accounting Quality of IAS and IFRS over Time: The Case of Germany: *Journal of International Accounting Research*, Vol. 8, No. 1, pp. 31-55.
- Ronen, Joshua, and Simcha Sadan (1981). *Earnings Management Application*, Published by Addison Wesley.
- Van Tendeloo B. and Vanstraelen A. (2005). The Impact of Voluntary Adoption of IFRS in Germany, *European Accounting Review*, Vol. 14, No. 1, 155-180.
- Wali K. (2013). Self-interest Factors in Management of Earnings Reporting in The Netherlands and Germany. The international economics and engineering research.
- Wild J.J. Warfield, T, and K.J. Wild (2007). Management Ownership and the In-Formativeness of Earnings as an Explanatory Variable for Returns, *The Accounting Review* 67, pp 821-842.

APPENDIX

APPENDIX (1) IFRS VS GAAP

Fig. 1. Comparison International Financial Reporting Standards (IFRS) with Generally Accepted Accounting Principle (GAAP)

IAS/IFRS	Topic	IFRS	GAAP	Result
IAS 37	Recognition of provisions	Threshold for recognition is 'possible' (defined as 'more likely than not')	Also uses a 'probable' threshold – but this is interpreted as a higher threshold than 'more likely than not'. Most probable outcome to settle the obligation.	IFRS more strict
IAS 37	Measurement of provisions – range of estimates	Best estimate to settle the obligation, which generally involves the expected value method.	If no one item is more likely than another, use the low end of the range of possible amounts. Unless specifically permitted by an accounting standard, discounting is only allowed where the timing and amount of the future cash flows are fixed and determinable.	IFRS more strict
IAS 37	Measurement of provisions – discounting	Discounting is required.		IFRS more strict
IAS 37	Disclosures that may prejudice seriously the position of the entity in a dispute	In extremely rare cases amounts and details need not be disclosed, but disclosure is required of the general nature of the dispute and why the details have not been disclosed.	Disclosure is required.	IFRS more strict
IAS 37	Initial measurement of decommissioning provisions	Asset retirement obligation (ARO) liability measured as the best estimate of the expenditure to settle the obligation or to transfer the obligation to a third party at the end of the reporting period.	ARO liability measured at fair value in the period it is incurred if a reasonable estimate of fair value can be made.	IFRS requires more explanation
IAS 37	Recognition of restructuring provisions	Recognise if a detailed formal plan is announced or implementation of such a plan has started.	Recognise when a transaction or event occurs that leaves an entity little or no discretion to avoid the future transfer or use of assets to	IFRS requires more explanation

settle the liability. An exit or disposal plan, by itself, does not create a present obligation to others for costs expected to be incurred under the plan.

Source: Researcher; depending on data taken from Deloitte Touche Tohmatsu London, [www.deloitte.com](http://www.deloitte.com)

APPENDIX (2) FINANCIAL STATEMENTS

Fig. 2. Key figures Südzucker AG; Consolidated financial statement from 2003-2004

	Note	29.02.2004	28.02.2003'
Subscribed capital		174.8	174.8
Capital reserves		951.3	938.3
Revenue reserves	V. 1.5	851.0	712.1
Equity attributable to shareholders of Südzucker AG		1,977.1	1,825.2
Minority interests	V. 1.5	408.8	395.8
Shareholders' equity	V. 1.5	2,385.9	2,221.0
Provision for pensions	V. 1.6	379.1	369.1
Deferred tax liabilities		333.0	342.7
Other provisions and accrued liabilities		222.6	207.1
Non-current financial liabilities	V. 1.8	1,079.6	888.3
Other liabilities	V. 1.8	24.9	6.0
<b>Total non-current provisions and liabilities</b>		<b>2,039.2</b>	<b>1,813.2</b>
Other provisions and accrued liabilities		415.4	399.9
Current financial liabilities	V. 1.8	325.9	547.4
Other liabilities	V. 1.8	871.3	844.2
<b>Total current provisions and liabilities</b>		<b>1,612.6</b>	<b>1,791.5</b>

Source: Researcher' work based on data taken from Annual Report

Fig. 3. Key figures Südzucker AG; Consolidated financial position from 2005-2007

€ million	2006/07	2005/06
Restructuring fund levy	512.8	0.0
Selling and advertising expenses	337.5	339.0
Operating and administrative expenses	228.6	210.1
Production and supplementary levies	0.0	61.5
Leasing and rental expenses	37.0	36.1
Foreign exchange and currency translation losses	3.3	0.0
Losses on disposals of current and non-current assets	6.6	4.8
Other expenses	129.0	119.9
	<b>1,254.8</b>	<b>771.4</b>

Source: Researcher' work based on data taken from Annual Report

Fig. 4. Key figures Südzucker AG: Consolidated financial position from 2006-2007

€ million	Note	2006/07	2005/06
<b>Revenues</b>	(6)	<b>5,764.9</b>	<b>5,346.5</b>
Change in work in progress and finished goods inventories and internal costs capitalised	(7)	75.8	(45.5)
Other operating income	(8)	273.1	80.3
Cost of materials	(9)	(3,350.8)	(3,318.9)
Personnel expenses	(10)	(708.2)	(656.5)
Depreciation	(11)	(348.5)	(237.1)
Goodwill impairment loss	(12)	(580.4)	0.0
Other operating expenses	(13)	(1,254.8)	(771.4)
<b>Income (loss) from operations</b>	(14)	<b>(128.9)</b>	<b>397.4</b>
Income from associated companies	(15)	0.7	11.4
Financial income	(16)	47.8	53.4
Financial expense	(16)	(146.8)	(134.0)
<b>Earnings (loss) before income taxes</b>		<b>(227.2)</b>	<b>328.2</b>
Taxes on income	(17)	(18.8)	(23.7)
<b>Net earnings (loss) for the year</b>		<b>(246.0)</b>	<b>304.5</b>

Source: Researcher' work based on data taken from Annual Report:

Fig. 5. Key figures Südzucker AG: Consolidated Balance Sheet from 2005-2007

€ million	Notes	28.02.2009	29.02.2008
Subscribed capital		189.4	189.4
Capital reserves		1,137.6	1,137.6
Revenue reserves		719.6	713.8
<i>Equity attributable to shareholders of Südzucker AG</i>		<i>2,046.6</i>	<i>2,040.8</i>
Hybrid capital		683.9	683.9
Other minority interest		498.9	574.8
<b>Shareholders' equity</b>	(25)	<b>3,229.4</b>	<b>3,299.5</b>
Provisions for pensions and similar obligations	(26)	404.5	401.7
Other provisions	(27)	200.9	211.3
Non-current financial liabilities	(29)	1,154.1	1,232.6
Other liabilities	(28)	15.4	21.0
Deferred tax liabilities	(16)	165.0	165.2
<b>Non-current liabilities</b>		<b>1,939.9</b>	<b>2,031.8</b>
Other provisions	(27)	117.3	181.5
Current financial liabilities	(29)	890.9	669.0
Trade payables and other liabilities	(28)	1,497.7	1,716.9
Current tax liabilities		33.4	18.7
<b>Current liabilities</b>		<b>2,539.3</b>	<b>2,586.1</b>
<b>Total liabilities and shareholders' equity</b>		<b>7,708.6</b>	<b>7,917.4</b>

Source: Researcher work based on data take from Annual Report

Fig. 6. Key figures Hankel group: Consolidated Balance Sheet from 2012-2014

	Notes	Dec. 31, 2003	Dec. 31, 2004
Subscribed capital	22	374	374
Capital reserve	23	652	652
Revenue reserves	24	2,788	4,359
Unappropriated profit		167	185
Gains and losses recognized in equity	25	-670	-982
<b>Equity excluding minority interests</b>		<b>3,311</b>	<b>4,588</b>
Minority interests	26	75	16
<b>Equity including minority interests</b>		<b>3,386</b>	<b>4,604</b>
Provisions for pensions and other post-employment benefits	27	1,642	1,815
Other provisions	28	1,056	1,513
Provisions for deferred tax liabilities	29	181	455
<b>Provisions</b>		<b>2,879</b>	<b>3,783</b>
Borrowings	30	1,855	3,174
Trade accounts payable	31	789	1,099
Other liabilities	32	453	478
<b>Liabilities</b>		<b>3,097</b>	<b>4,751</b>
<b>Total equity and liabilities</b>		<b>9,362</b>	<b>13,138</b>

### APPENDIX (3) CONSOLIDATED BALANCE SHEET

Report Fig. 7. Key figures Hankel Group: Consolidated Balance Sheet from 2003-2004

	Note	2005	2006
Subscribed capital	21	374	374
Capital reserve	22	652	652
Revenue reserves	23	4,764	5,362
Gains and losses recognized in equity	24	-419	-901
<b>Equity excluding minority interests</b>		<b>5,371</b>	<b>5,487</b>
Minority interests	25	28	60
<b>Equity including minority interests</b>		<b>5,399</b>	<b>5,547</b>
Pensions and similar obligations	26	1,061	788
Other long-term provisions	27	427	294
Long-term borrowings	28	2,400	2,322
Other non-current liabilities	29	59	126
Deferred tax	30	473	427
<b>Non-current liabilities</b>		<b>4,420</b>	<b>3,957</b>
Short-term provisions	31	932	992
Short-term borrowings	32	1,405	1,012
Trade accounts payable	33	1,333	1,494
Other current liabilities	34	455	344
<b>Current liabilities</b>		<b>4,125</b>	<b>3,842</b>
<b>Total equity and liabilities</b>		<b>13,944</b>	<b>13,346</b>

Source: Researcher' work based on data taken from Annual

Fig. 8. Key figures Hankel Group: Consolidated Balance Sheet from 2005-2006

	Note	2005	2006
Subscribed capital	21	374	374
Capital reserve	22	652	652
Revenue reserves	23	4,764	5,362
Gains and losses recognized in equity	24	-419	-901
<b>Equity excluding minority interests</b>		<b>5,371</b>	<b>5,487</b>
Minority interests	25	28	60
<b>Equity including minority interests</b>		<b>5,399</b>	<b>5,547</b>
Pensions and similar obligations	26	1,061	788
Other long-term provisions	27	427	294
Long-term borrowings	28	2,400	2,322
Other non-current liabilities	29	59	126
Deferred tax	30	473	427
<b>Non-current liabilities</b>		<b>4,420</b>	<b>3,957</b>
Short-term provisions	31	932	992
Short-term borrowings	32	1,405	1,012
Trade accounts payable	33	1,333	1,494
Other current liabilities	34	455	344
<b>Current liabilities</b>		<b>4,125</b>	<b>3,842</b>
<b>Total equity and liabilities</b>		<b>13,944</b>	<b>13,346</b>

Source: Researcher work based on data taken from Annual Report

Key 9. figures Hankel Group: Consolidated Balance Sheet from 2007-2009

Shareholders' Equity and Liabilities					
in million euros	Note	2007	%	2008	%
Subscribed capital	23	438	3.3	438	2.7
Capital reserve	24	652	5.0	652	4.1
Retained earnings	25	5,963	45.7	6,805	42.3
Gains and losses recognized in equity	26	-1,410	-10.8	-1,411	-8.8
<b>Equity excluding minority interests</b>		<b>5,643</b>	<b>43.2</b>	<b>6,484</b>	<b>40.3</b>
Minority interests	27	63	0.5	51	0.3
<b>Equity including minority interests</b>		<b>5,706</b>	<b>43.7</b>	<b>6,535</b>	<b>40.6</b>
Pensions and similar obligations	28	657	5.0	833	5.2
Long-term income tax provisions	29	100	0.8	177	1.1
Other long-term provisions	29	119	0.9	336	2.1
Long-term borrowings	30	2,304	17.7	2,402	14.9
Non-current financial liabilities	31	147	1.1	77	0.5
Other non-current liabilities	32	10	0.1	9	0.1
Deferred taxes	33	314	2.4	412	2.5
<b>Non-current liabilities</b>		<b>3,651</b>	<b>28.0</b>	<b>4,246</b>	<b>26.4</b>
Current income tax provisions	34	152	1.2	343	2.1
Other current provisions	34	763	5.9	866	5.4
Short-term borrowings	35	838	6.4	1,817	11.3
Trade accounts payable	36	1,477	11.3	1,878	10.5
Current financial liabilities	37	246	1.9	272	1.7
Other current liabilities	38	200	1.5	306	1.9
Income tax liabilities	15	0.1	0.1	11	0.1
<b>Current liabilities</b>		<b>3,691</b>	<b>28.3</b>	<b>5,293</b>	<b>33.0</b>
<b>Total equity and liabilities</b>		<b>13,048</b>	<b>100.0</b>	<b>16,074</b>	<b>100.0</b>

Source: Researcher work based on data taken from Annual Report

Fig. 10. Key figures Henkel Group: Consolidated Balance Sheet from 2007-2008

€ million	Amount adjusted 2013/14	Accounting changes due to IFRS 11	Amount presented 2013/14
<b>Income Statement</b>			
<b>Revenues</b>	<b>7,533</b>	<b>-202</b>	<b>7,735</b>
<b>EBITDA</b>	<b>889</b>	<b>-44</b>	<b>933</b>
Depreciation	-267	8	-275
<b>Operating profit</b>	<b>622</b>	<b>-36</b>	<b>658</b>
<b>Result from restructuring and special items</b>	<b>-116</b>	<b>-0</b>	<b>-116</b>
Income from companies consolidated at equity	48	48	-
<b>Income from operations</b>	<b>554</b>	<b>12</b>	<b>543</b>
Income from companies consolidated at equity	-	-20	20
<b>Financial result</b>	<b>-60</b>	<b>1</b>	<b>-61</b>
<b>Earnings before income taxes</b>	<b>494</b>	<b>-8</b>	<b>502</b>
Taxes on income	-105	8	-112
<b>Net earnings</b>	<b>390</b>	<b>0</b>	<b>390</b>
of which attributable to Südzucker AG shareholders	282		282
of which attributable to hybrid capital	26		26
of which attributable to minority interests	82		82
<b>Earnings per share (€)</b>	<b>1.38</b>		<b>1.38</b>

Source: Researcher' work based on data taken from Annual Report

Fig. 11. Key figures Henkel Group: Consolidated financial position from 2013-2014

in million euros	Note	2009	%	2010	%
Issued capital	12	438	2.8	438	2.5
Capital reserve	13	652	4.1	652	3.7
Treasury shares		-109	-0.7	-99	-0.5
Retained earnings	14	7,017	44.4	7,926	45.2
Other components of equity	15	-1,524	-9.6	-1,058	-6.0
<b>Equity attributable to shareholders of Henkel AG &amp; Co. KGaA</b>		<b>6,474</b>	<b>41.0</b>	<b>7,859</b>	<b>44.9</b>
Non-controlling interests	16	70	0.4	91	0.5
<b>Equity</b>		<b>6,544</b>	<b>41.4</b>	<b>7,950</b>	<b>45.4</b>
Pension obligations	17	867	5.5	594	3.4
Non-current income tax provisions	18	152	1.0	119	0.7
Other non-current provisions	18	241	1.5	302	1.7
Non-current borrowings	19	3,426	21.7	3,570	20.4
Non-current financial liabilities	20	88	0.5	128	0.7
Other non-current liabilities	21	20	0.1	17	0.1
Deferred taxes	22	367	2.3	416	2.4
<b>Non-current liabilities</b>		<b>5,161</b>	<b>32.6</b>	<b>5,146</b>	<b>29.4</b>
Current income tax provisions	23	224	1.4	327	1.9
Other current provisions	23	938	5.9	867	4.9
Current borrowings	24	660	4.2	536	3.1
Trade accounts payable	25	1,885	11.9	2,308	13.1
Current financial liabilities	26	145	0.9	175	1.0
Other current liabilities	27	251	1.6	205	1.1
Current income tax liabilities		10	0.1	11	0.1
<b>Current liabilities</b>		<b>4,113</b>	<b>26.0</b>	<b>4,429</b>	<b>25.2</b>
<b>Total equity and liabilities</b>		<b>15,818</b>	<b>100.0</b>	<b>17,525</b>	<b>100.0</b>

Source: Researcher' work based on data taken from Annual Report