VOLUNTARY ADOPTION OF IFRS IN GERMANY: A REGULATORY IMPACT STUDY

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Abstract

From 2005 onwards, consolidated financial statements of listed European companies have to comply with IFRS (IAS). Many German companies began adopting those standards in the 1990s, on a voluntary basis, because of their need to access international capital markets. A broader and more dispersed investor community could be achieved only by accepting significant regulatory consequences.. The purpose of this paper is to analyse the financial impact of initial IFRS adoption on the statement of changes in equity and the income statement of German companies. Our analysis comprised all non-financial DAX groups applying IFRS plus additional listed companies in two selected industrial sectors. The two sectors are chemical pharmaceutical and fashion where, apart from the DAX companies quoted, we have studied other relevant companies in each sector. The analysis of the reconciliations of the retained earnings and income statement has been developed both from company and type-of-adjustment perspective, classifying items in similar accounting categories. The results are that the impact of initial adoption of IFRS was, both individually and overall, significant. In relation to the specific sectors analysed, impact is also relevant, although not as much as in DAX companies, but differs between the sectors.

Keywords: IFRS adoption, capital market access, Germany, IFRS adjustments, chemical-pharmaceutical sector, fashion industry.

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1. Introduction

From the beginning of 2005, public companies in Europe have to apply international accounting standards. However, 2005 is not the first year in which the impact of this change in accounting rules can be assessed. Early adoption on a voluntary basis was observable from the 90s in several EU member countries. This voluntary adoption of International Financial Reporting Standards (IFRS, including old IAS) is a disclosure choice, which has been studied intensively in recent times. Many scholars have examined the usefulness of accounting information when different accounting principles are adopted. The main focus of these studies is on the implications coming from voluntary adoption on financial market efficiency (e.g. see Verrecchia, 2001 for a literature review on the topic). For instance, Ashbaugh and Pincus (1998) discovered for a sample of non-US firms that adopted IAS between 1990 and 1993 a significant increase in the accuracy of the analysts forecast in the year of adoption. Other researchers emphasize that our understanding of the information asymmetry problem must be based on the institutional framework of the IFRS disclosure as a choice. Several empirical studies distinguish the benefits coming from early adoption for companies traded on the stock market. Evidences suggest that firms adopting IFRS are typically internationally oriented with multiple stock listings and considerable cross-border activities (e.g. Dumontier and Raffournier, 1998).

The focus of this study is on those German companies which voluntary adopted IFRS in the period 1994-2003. In the 1990s some German firms started adopting IFRS as their accounting policy. In 2001, as some studies show (e.g. Renders et al., 2005), German firms which voluntarily reported under IFRS, were predominant amongst voluntary adopters on the European stock market (69 out of 108 firms from Austria, Belgium, Denmark, France, Germany, Italy and the Netherlands). The objective of this empirical study is different from the studies mentioned above. It aims at distinguishing those e accounting items that are most significantly influenced by early IFRS adoption. The underlying idea is that the institutional environment, i.e. national GAAP, is country-specific and national differences are observable not only on industry, but also on a country-level. For instance, recent studies suggest that the most significant effects of the change to international standards in UK will be the recognition of all derivatives on the balance sheet at fair value, restrictions on the use of hedge accounting, the full recognition of pension deficits, and revised accounting for mergers and acquisitions (Cairns, 2004). Although there are numerious empirical arricles on the impact of the institutional framework on the properties of the accounting earnings (e.g. Ball et al, 2000), the rational behind this study is that a careful examination of the national accouting principles is necessary to make a more comprehensive analysis of the IFRS adoption at cross-country level. Since the institutional differences influence the reconciliation effect, we present first a comparison between IFRS and HGB in Section 2. In Section 3 we examine the IFRS effects on German companies in the DAX Index[1]. As explained later, the focus on the DAX companies is due to their international importance, high accounting complexity and accounting policy based on transparency. To provide more comprehensive analysis of the IFRS effect on the firm account in Sections 4 and 5 we analyse in details the accounting differences after the reconciliation prepared by the German companies in two key industries: chemical-pharmaceutical and fashion. Section 6 summarises the main conclusions[2].

2. German GAAP (HGB) to IFRS: main differences

Since one of the main objectives of this study is to describe and quantify IFRS effects on German companies, we provide a framework in relation to the main differences[3] between IFRS[4] and German GAAP (including HGB). The difference, which has been widely recognized in the literature, is the origin of both accounting systems. The German accounting model is considered to be more conservative compared to the IFRS accounting model. The latter is clearly based on Anglo-Saxon traditions where the principle of relevance[5] prevails over others (Lamb et al., 1998). This divergence explains many of the accounting implications drawn below. Accounting regulations in Germany are not as developed as in the countries with Anglo-Saxon legal origins. Often, specific applications of this conservatism do not come from specific legal rules in HGB, but from well-established practices. Differences detected can be classified into several different categories (Nobes, 2001). The current empirical study applies a classification developed by Nobes (2001). Some new categories have been added and explained in the context. The results are summarized under two broad categories: a) assets and liabilities: recognition and measurement and b) consolidation procedures.

2.1. Assets and liabilities: recognition and measurement

A careful examination of the HGB accounting rules in comparison with the IFRS has been conducted. The differences in the recognition and measurement of assets and liabilities were found to be mainly in those accounting criteria followed by HGB, which do not meet the ones required by IFRS.

Under HGB, trading, available-for-sale and derivative financial assets and trading and derivative liabilities are not marked to market as they are under IFRS. Internally-generated intangible assets, which are expected to provide ongoing service to the company, must not be recognized under HGB, while IFRSs state that they should be recognised as long as they are able to generate profit for the company and they can be reliably quantified. In particular, this applies to development costs. Under HGB, foreign currency monetary balances are generally translated at the worse of transaction and closing rates so as to avoid the recognition of gains on unsettled balances. Under IFRS, positive and negative exchange differences must be recognized in the income statement although they have not yet been settled.

Under HGB, impairment tests on fixed assets are based on market replacement costs and much less on their value in use (net cash flow of the corresponding cash generating unit) due to the absence of an accepted methodology at the time of computing that value. Under IFRS, the higher of net realisable value and value in use is considered.

Leases are normally classified according to tax rules and therefore are seldom considered as finance leases following HGB. IFRS define finance leases widely, including cases where the acquirer does not ultimately buy the asset.

Under HGB inventories can be valued at the lowest of cost, net realizable value and replacement cost and they may include attributable portions of general administrative overheads although traditionally they have included only direct costs. IFRS only refer to cost and realizable value and always include general manufacturing overheads portions in cost.

Start-up costs may be capitalised and amortised under HGB and that is not possible under IFRS.

The recognition of provisions under IFRS is much more restrictive than under HGB.

[1] We have excluded financial companies because of their special features.

[2] Appendix A lists all the companies analysed together with some key financial data.

[3] We have considered only differences in measurement and valuation, which may lead to differences in equity or net income of the companies. We are not going to refer in this section to differences in disclosure as those are not subject for adjustments and therefore are not a purpose of the paper.

[4] It is worth mentioning that IRFS considered in this section are those endorsed by the EU at the time this paper has been written, that is, those included in 1725/2003 law, published in the EU official Diary on the 13th of October 2003, plus IAS 32 and 39, since they are likely to be endorsed as well.

[5] See IASB Conceptual Framework (1989).

Under IFRS, pension provisions must be estimated using the projected unit credit method, whereas companies applying HGB use tax determined rates of interest, and do not take into account future salary and pension increases. Actuarial losses are often immediately recognized in Germany while under IFRS they can be deferred. Under HGB, German companies do no take into account all temporary differences (they account only for timing differences), nor tax effects of the tax loss-carryforwards for deferred tax computations (unless compensatable with recognised deferred tax liabilities) or the effects of the other recoverable differences. Recognition of revenues on construction contracts. Under HGB the completed contract method is used while under IFRS the percentage of completion is used.

2.2. Consolidation procedures

We conducted a comparative assessment of the HGB and IFRS accounting principles, which determine the consolidation procedure. The distinction between the models can be summarised as follows:

Under HGB the acquisition date may be identified as the date of first time consolidation of the subsidiary while under IFRS acquisition date is always the date when control becomes effective.

Certain business combinations may be accounted for as pooling of interests under HGB even though an acquirer can be identified and that is not possible under IFRS. However, in fact this method is used very rarely in Germany.

Consolidation goodwill can be deducted immediately against equity under HGB while under IFRS it must be recognised as an asset,amortized and tested for impairment when considered necessary. Following HGB measurement of assets and liabilities acquired in a business combination at their fair values must not exceed the cost of acquisition, while IFRS state that those values exceeding fair value of the items acquired in a business combination must be recognised as negative goodwill.

The recognition of provisions in business combinations following IFRS is more restrictive than under HGB.

3. IFRS effect on German companies: DAX sample

3.1. Sample selection

The empirical analysis of this study is based on a sample of German companies included in the DAX Index that apply IFRS. Currently the index comprises 30 companies, of which 6 provide financial services. The companies in the financial sector were excluded from the data analysis because of their specific accounting principles (For details and sample statistics, see Appendix B).

Table 1. Sample selection: DAX index

Number of all listed companies in DAX	30
Less financial sector	(6)
Final sample	24
Less companies not applying IFRS	(10)
Final sample of IFRS implementing companies	14

For the 14 DAX companies in the sample we analysed the IFRS effects at different levels: company, accounting area, and combined for the whole sample.For each company we analysed the IFRS statements of the first year of IFRS application with a special focus on the reconciliation of retained earnings (RE) and income statement (IS).

The companies in the sample started applying IFRS in different years, from 1994 to 2001. During that time IFRS evolved, the evolution has been taken into account in the data analysis. For this purpose, we distinguish and present in the table below three periods: before 1999, 1999-2000 (revised IAS 17 and 19; new IAS 36 to 38; SIC 8) and 2001 (IAS 39). It is worth mentioning that the IFRS evolved further after 2005. Since it does not have an implication on the IFRS effect in the time of adoption, we disregard these amendments in the data analysis.

Table 2. Classification by year of IFRS adoption

Year of IFRS adoption	Company
Before 1999	TUI, HENKEL, MAN, LUFTHANSA, ALTANA, BAYER, SHERING, DEUSTCHE POST, ADIDAS
1999-2000	METRO, RWE, WELLA, ESCADA
2001 on	VW, BMW, LINDE, STADA, HUGO BOSS.

SIC 8 deals with first-time application of IFRS as the primary basis of accounting, stating that new IFRS statements "should be prepared and presented as if the financial statements had always been prepared in accordance with the Standards and Interpretations effective for the period of first-time application" (paragraph 3). SIC 8 became effective on 1 August 1998. Before SIC 8 there was not specific guidance on first-time application of IFRS. However, IAS 8, paragraphs 46 to 48, referred to changes in accounting policies made on the adoption of an International Accounting Standard. Since SIC 8 uses the same retrospective principle as IAS 8, we understand that all companies in the sample, whether they started applying IFRS before or after August 1998, followed a similar retroactive basis.

IAS 8, paragraph 49, when defining the benchmark treatment of changes in accounting policies (including changes from an adoption of a new International Accounting Standard) states that any resulting adjustment should be reported as an adjustment to the opening balance of retained earnings. It is generally understood that, in accordance with the retroactive principle, the adjustment is net of tax effects[6]. Consequently we assume that, unless otherwise specified by the companies, the IFRS effects are shown net of taxes.

3.2. Analysis of the effects by company

Appendix B summarises the RE and IS reconciliations for the 14 DAX companies, and discloses totals and percentages by reconciling item (or adjustment type) and by company. Totals and percentages shown are not homogeneous. However, as discussed below, the effects of those inconsistencies are minor and, thus, do not affect the conclusions of our analyses. As shown on Exhibit 2, the companies started applying IFRS in different years, and so impacts were different. For companies adopting IFRS before 1999 or between 1999 and 2000, we reviewed the impact of subsequently applying the new or revised IAS of 2000 and 2001, respectively, in the statement of changes in equity (exceptionally, in IS), and confirmed that those subsequent effects were, in general, minor (see appendices B, C and D). One of the reasons for the effects of application of new or revised IAS being minor is that often there are transitional rules lessening the degree of retroactivity. However, as shown in appendix B, the application of IAS 39 in 2001 had significant effects. The different starting dates theoretically affect the comparability of the totals by company and adjustment type because of the price changes. However this effect is also considered minor: most companies in the sample started applying IFRS on or after 1998, and, in any case, inflation in Germany has been consistently low. On the other hand, we often measure the IFRS effects in relative terms by reference to RE and IS of the same year without any time factor to consider. Companies disclose different levels of analysis of the nature and amounts of the reconciling items, and the information is in the form of a reconciling list or in the form of comments in the notes, but never as "double entries" disclosing all the financial statements lines affected[7]. So we could only understand the IFRS effects on a piecemeal basis, and often explanations were very scarce and rather cryptic. We tried to grasp the significance of the IFRS adjustments reading the RE and IS reconciliations together with the full financial statements, specially the disclosures in the notes.

3.2.1. Effects on retained earnings (RE)

We comment below on the numerical information regarding the RE reconciliations disclosed in Appendix B: The quantative effects are very different from company to company. There are some visible general patterns, but company-specific factors were predominant. There is no relationship between the size of the IFRS effects and the year of first application. This reinforces observations made above. The categorisation of companies in the sample by the significance of the net effect (either plus or minus) expressed as a percentage on HGB RE is as follows:

Eight companies in the sample show percentages below 10 %

Three companies, between 14 and 29 %

Three companies show percentages above 50 %.

d) However, the analysis must be made also on a gross basis, computing the positive and negative adjustments separately. From that perspective, for example, eight companies had positive effects higher than 30% on RE.

e) The four companies with the highest net effect on RE all disclosed some specific large adjustment, as shown in Exhibit 3. It is worth mentioning that two of the four companies with the highest net effect belong to the automotive industry, and both show a big adjustment for the capitalisation of development costs (IAS 38). The third automobile company in the sample –MAN- did not have such an effect, because it first applied IFRS before IAS 38 went into effect; and, when it adopted it, the effect was minor, either because of circumstantial reasons or because of the transitional provisions of the new standard.

f) Despite the significance of company-specific factors, it is worth considering the combined IFRS effect for the 14 companies. The first application of IFRS by the 14 companies meant a net increase of combined RE by a € 15.2 billion, representing a 26 % increase on HGB RE.

[6] See for example PricewaterhouseCoopers (1998), page 12-24.

[7] For example, part of the adjustment to the provision for pensions might have resulted not in a salary expense, but in an increase in the value of inventories because of the increased labour cost, and this effect is not disclosed separately, but on a net basis.

Table 3. Companies with highest IFRS effects (*)

Company	Positive adjustments	Negative adjustments
TUI	PPE depreciation	Goodwill
VW	R&D	Deferred taxes
	PPE depreciation	Pensions
	Write-back provisions	
BMW	R&D	Financial instruments
	PPE depreciation	
DEUTSCHE POST	Write-back of provisions	Pensions

* Both in absolute and in % terms. PPE from now on means Property, Plant and Equipment

3.2.2. Effects on IS

In Appendix B there is also an analysis of the IFRS IS reconciliation[8], except in the cases when no information was available and could not be estimated. The information was only given for the first year of IFRS application and not for the comparative year. Given the very limited amount of information disclosed, it has not been possible to deepen our analyses of the IS conciliation. Below we make some quantitative remarks at company level, whereas the analysis by adjustment type is presented in the next subsection:

By inspection of the Appendix B, we can see that there is no relationship between the IS and the RE adjustments referred to above. Moreover, in about half of the 9 companies disclosing the IS reconciliations, the sign (positive or negative) of the reconciliation is the same as for the RE reconciliation, and in the other half the sign is different.

The significance of the reconciling items as measured against the HGB net earnings varies sharply from one company to another (from a –16% to a +25%), but they are not as large as for RE.

The distinction between gross/net effects we made in the previous section on RE is valid for IS: all companies disclose a combination of positive and negative IS adjustments.

Two companies disclosed a relatively big positive effect: BMW and RWE for reasons summarised in Appendix B.

The combined net positive IFRS effect for the nine companies totals € 411 million, representing a combined increase of 10 % on HGB combined net profits.

Analysis by type of adjustment

We suggest that, for extrapolation purposes, the analysis by type of adjustment is the most useful. As indicated, the adjustments are supposed to be net of the tax effects. Again we note that there might be cases where the same reconciling item affects both assets and liabilities, although the effects are not separately disclosed in the RE conciliations:

Below we summarise the numerical content in Appendix B (RE portion):

Increase in intangible assets from capitalisation of some development costs by € 6,3 billion, basically traceable to VW and BMW as mentioned in the previous subsection. Decrease in PPE accumulated depreciation by € 6,4 billion: a number of companies had applied accelerated tax depreciation methods or rates for HGB purposes. The main adjustments correspond, once again, to VW and BWM, two heavy industrial groups, but also to TUI, a service company. RWE, on the other hand, shows a negative amount, for undisclosed reasons.

Decrease in other provisions by € 4,8 billion. The fact that almost all of the companies share this type of adjustment reflects the traditional philosophy of German companies, fuelled by a generous tax system, toward creating hidden reserves by, among other things, inflating provisions. It is not possible to quantify the incremental factor caused by IAS 38 going into force for 2000 beyond the observation that most (although not all) of the companies that started applying IFRS after 1999 disclose higher effects.

Deferred tax also caused a big net effect of € 4,6 billion. This originated from different causes: computing all temporary differences regardless of their recurrence or date of reversion, as well as taking into account tax loss-carryforwards (this is the most frequently quoted reason) and other tax recoverable differences. All the companies have foreign subsidia-

[8] From our point of view, nature and extent of the reconciling items must come from two related causes: original distance between HGB and IFRS and balance sheet IFRS adjustments. For example: companies might have provided for future maintenance expense for HGB purposes. If so, the provision had to be written back following IFRS. The net IFRS effect on IS would then be an increase in the year expense for not having provided for them before, and a decrease for not providing for the next period. Also the IS adjustments are likely to reflect the net effect of a combination of different IFRS impacts. Again an example: the adjustment in the depreciation expense for the year may reflect concurrently or on a net basis the effects of having fair valued the subsidiaries' PPE following an acquisition, and the change of the useful lifes (versus tax allowed estimates) and/or of the depreciation method.

ries with different tax systems: the specific mix of subsidiaries is one of the key factors in determining the adjustment. On the other hand, assuming that the other IFRS adjustments are shown net of taxes, the item should not incorporate the tax consequences of the conversion to IFRS.

Inventories increased by € 2,3 billion, usually because of the application of full cost. We included under that heading the effect, much less, of applying the percentage of completion method.

Pension liabilities increased by € 10,7 billion, the single most important reconciling item, affecting all companies, except BMW. In relative terms this single item absorbed 18 % of the combined HGB retained earnings. It is not possible to identify the incremental (or decremental) effect of the revision of old IAS 19 that went into effect in 1999. In any case, the reconciliation affects practically all the companies regardless of the year of first application of IFRS. Almost all companies, whether the first application took place before, on or after 1999, adopted the projected unit credit method, changing a number of actuarial assumptions, such as the rate of interest or estimated future increases in salaries and pensions. Companies do not specify whether or not actuarial losses were deferred; however, considering the predominant practice in Germany, we can assume that there was a full recognition of them.

Financial instruments: the companies showing effects from applying IAS 39 were, of course, the ones that started applying IFRS in 2001 onwards (D. Post, that started in 1998, is an exception). Appendix B also details the effect from the subsequent application of IAS 39 by the other companies. The IAS 39 effect varies from company to company for three possible reasons: the circumstantial risk exposure (both in absolute and in hedging terms), fair values prevailing at the end of 2001 and transitional provisions of IAS 39.

As per IS effects, the adjustment types are of the same nature as the ones found in the RE conciliations. We can summarise our comments in subsections 3.2 and 3.3 as follows:

Company-specific factors are predominant when explaining IFRS effects for the 14 DAX companies.

However there are a number of relatively common characteristics, as shown in Appendix B:

In ten companies the conversion to IFRS meant an increase in RE, and in the remaining four the net negative adjustment is mostly due to an increase in the pension liability. The basic explanation is simple: HGB accounts reflected the prudent philosophy in German accounting. The combined effect is huge.

That mentality had created hidden reserves in PPE (excess of depreciation), provisions (overstatements), deferred tax assets (exclusion of tax effects of tax-loss carryforwards), inventories (use of direct cost methods), intangible assets (expensing all development cost most notably in the automotive industry). But also it has been found that pension provisions were understated by a big amount.

The financial situation, including working capital, improves under IFRS, and is represented on a more solid basis in IFRS accounts, as compared with the HGB accounts.

Statistical test

This section summarizes the results of the statistical test performed. The objective is to distinguish whether the effect of the international accounting principles is significant for the group in the sample. The main difficulty when performing the test was that the companies under review used a different format for their accounts, i.e. different categories for different revenues and expenses. The difference in the reports does not allow presenting a comprehensive account-by-account comparison for the companies in the sample. However, three accounts have been reported publicly in the same category. The results of the statistical test are presented in the table below. The initial hypothesis, which has been tested with a paired-sample for means, is that the adoption of IFRS does not have a significant effect on the group accounts. For example, several companies reported the year after the enforcement of the international standards an increase in the goodwill value, although for the majority of the companies in the sample the change was negative. The statistical test allows confirmination of a significant effect of IFRS adoption on some accounts, as revealed in the statements of the overall 13 companies (for one company the accounts were not clear enough to include them in the data analysis).

Table 4. Statistical test: before and after the IFRS adoption[+]

Accounting item:	Mean; standard deviation	p-value (two-tales)
Shareholder’s equity	23.05% (0.37)	0.044**
Goodwill	8.26% (0.15)	0.074***
Provisions for pension	-6.49% (0.07)	0.004*

[+] The test has been performed as follows. The percentage increase or decrease of the value has been calculated from the firm’s reports. The null hypothesis was that the firm’s account before and after the adoption is the same, i.e. the group has been compared with a group, for which mean and standard deviation values are zero.

*Significant at 1%; ** Significant at 5%; *** Significant at 10%;

The conclusion of the statistical test is that a variation for three accounts is observable, i.e. both positive and negative values were registered. However, the difference before and after the introduction of IFRS for the group is significant. The sample is not large enough to make the conclusions more generalizable. The reconciliation data from 13 companies, nevertheless, shows that the change in the shareholder's equity, the goodwill and the provisions for pension after the implementation of international reporting was significant.

4. IFRS effects on chemical and pharmaceutical industry in Germany

As explained in the introductory section, the main criteria for selecting a particular industry for our research was the availability of quoted German companies within the industry that apply IFRS, together with the availability of quoted Spanish companies in the same industry. The chemical and pharmaceutical (*Ch&Ph*) was one of them. This denomination encompasses a broad set of industrial and trade activities: all types of chemical products for manufacturing and agricultural industries, pharmaceutical, cosmetic and other consumer products. Most of the companies in the sample produce and market a wide range of products in separate business lines. The most visible example is Bayer, with its multi-industry strategy. This breath of products and activities blurs any strong industry feature and makes it less likely that there are major accounting singularities.

4.1. The sample

The sample comprises all seven Ch&Ph quoted companies that used IFRS, of which five belong to the DAX index and, so, have been already analysed in Section 3. Only two non-DAX companies –Stada and Wella- that used IFRS were clearly in the Ch&Ph industry, and are new in the sample. Appendix A lists the companies and supplies some numerical information on them. Appendix C discloses the RE and IS reconciliations using the same format as Appendix B, that was the basis for our analysis in the preceding DAX section. Many observations are similar to the ones arrived at in the preceding section. However, since the companies with the highest reconciling items in the preceding section belong to other industries –automobiles and other- the combined IFRS effects in the Ch&Ph industry are lower than the combined effects in the DAX sample. The net combined effect represents only the 2 % on HGB RE. This effect by company ranges from -6% to 26 %. A characteristic of the sample is the different years of first application (see *Exhibit 2*). Two companies –Bayer and Schering- pioneered the IFRS application, since 1994. Both disclose the IFRS effects through IS[9]. The reconciling items for both companies are shown as RE adjustments in Appendices B and C for consistency with the other companies in the sample.

4.2. Comments by adjustment type and company

The main effects by adjustment type and company are as follows:

4.2. 1. Goodwill

Goodwill appears as a RE adjustment in three companies[10]. Two of them –Linde and Altana- explicitly state that, under HGB, goodwill had been written off against reserves on acquisition, and that, under IFRS, they wrote-back it in the balance sheet on a partial retroactive basis for acquisitions made before 1995 (as permitted by the old version of IAS 22). Consequently with the write back of the goodwill as an asset, in a number of companies there is a charge to IS caused by amortisation of goodwill that appears as a reconciling item in the first year of application.

4.2.2. Development costs

Only three companies in the sample –Linde, Wella and Stada- started applying IFRS when IAS 38 was already in force. Linde and Stada wrote back as intangible assets some previously expensed development costs (maybe because it referred to a business combination). The remaining companies kept expensing those costs, as permitted then. Altana justifies it with reference to uncertainties in clinical approval procedures.

4.2.3. PPE depreciation

Four companies out of the seven disclose that, for IFRS purposes, they changed retroactively the depreciation methods from tax-inspired ones to the straight-line method, although one of them, Linde, does not show any RE reconciling item (probably for reasons of immateriality). The companies disclose different effects on IS, depending –we understand- on the asset mix and their situation regarding their remaining useful life.

4.2.4. Pensions

Only Wella did not mention pensions in the RE reconciliation. All the others revised their pension provision following the application of the projected unit credit method. Linde discloses additionally the preceding method: the age of entry normal method. With one exception, the companies did not disclose the deferral method –if any- of actuarial differences.

4.2.5. Deferred taxes

The main reason quoted by the five companies in the sample for creating a deferred asset adjustment is the recognition of the tax effects of tax loss-carryforwards.

[9] Schering claimed to comply with both HGB and IFRS for all topics except pensions, for which it departed from HGB

[10] Bases for GW amortizations differ from company to company: Henkel (15-20 years), Stada (10 years), Altana (5-10 years), Linde (10-20 years except for a recent acquisition with an estimated useful life of 40 years), Schering (10-15 years).

4.2.6. Provisions

For reasons already explained in the Section 3, most companies in the sample reduce the balance of provisions. Wella increased it for the recognition of some tax risks, not recognised before.

4.2.7. Hedge accounting

Henkel, Bayer, Wella and Altana explain in the notes that they hedge risks (usually associated with foreign currency or/and with interest rates) and that they apply some kind of hedging accounting, without supplying further details. Of the two companies – Stada and Linde - that started applying IFRS when IAS 39 was already in force, the second discloses a positive reconciling item in the financial instruments line.

4.3. Final remarks

As explained, most companies in the sample show a wide variety of reconciling items. On a combined basis, most have a positive sign: either increase the value of assets (goodwill and other intangible assets, PPE, inventories, financial instruments, deferred taxes) or reduce the balances of provisions. The main exception is, once more, the pension liability amounting to € 0,9 billion, and balancing most of the positive net combined adjustments that total € 1,3 billion.

Although the combined net effect on RE and on IS is minor, individual effects on various items in the balance sheet and the IS are significant: both statements must represent the financial situation and the results in a more meaningful way under IFRS.

The differences in the year of the application (from 1994 to 2001) might have had impacts on the IFRS adjustments, considering that four companies out of the seven started applying IFRS before 1999, when SIC 8 took effect, and considering the fact already mentioned in section 3 that often the application of a new or of a revised standard for a company already using IFRS is softened by transitional provisions. All companies except Wella and Schering disclose net positive RE adjustment

As for development costs few companies believe that they meet the conditions for capitalising them for industry- specific reasons.

5. IFRS effects on fashion industry in Germany

5.1. Specific comments

The fashion industry was selected because there are three German quoted companies applying IFRS and three Spanish quoted companies in the same industry. All companies produce and trade fashion apparel and other goods. Appendix A lists the companies in the sample, and supplies some quantitative information. Appendix D, that has the same structure as Appendices B and C, summarises the RE and IS reconciliations and discloses totals and percentages by company and by adjustment types.

Out of the three German companies, only Adidas belongs to the DAX Index and was, therefore, already analysed in Section 3.

As for the reconciliations disclosed in Appendix D, the following points are worth emphasis:

The three companies share few common accounting characteristics. The main common one is that most reconciling items are working capital adjustments, consistent with the industry characteristics. This is the main differentiation from Ch&Ph.

H. Boss and Escada disclose moving from a direct cost to a full cost system for inventory valuation, and adopting the projected unit credit method for pension computation.

Adidas, the biggest company of the sample, has few reconciling items (see final remarks).

Escada, the smallest company, shows a variety of negative adjustments both in IS and in RE reconciliations, as if its conversion to IFRS coincided with a general cleaning exercise.

The negative adjustment in H. Boss affecting intangible assets is the net effect of capitalising some past development costs, minus expensing some expansion costs previously classified as intangible assets. The other two companies in the sample do not mention either development cost or expansion expenses.

Only Escada discloses a reconciling item regarding goodwill.

5. 2. Final remarks

As indicated at the beginning of the section, company-specific features exceed common industry characteristics. Adidas, the biggest in the sample, in theory should generate the biggest IFRS adjustments. However, this is not case. It made the conversion back in 1994 when a number of current IAS were not yet in force. Appendix D indicates that subsequent adjustments were not relevant, probably, again, because of the softening factor represented by transitional provisions of new or revised standards. In any case, disregarding the reclassification of minority interest, Adidas and, to a larger extent, H. Boss show positive adjustments to RE for IFRS purposes, in line with our observations on the DAX sample and on the Ch&Ph industry.

6. Conclusions

Taking the German experience as an example of early adoption of IFRS, the objective of our paper was to assess the IFRS effects in Germany - at a DAX level and for two main industries: Chemical-Pharmaceutical and Fashion.

The IFRS effects on German Corporations were important and often they meant a significant increase in retained earnings in the first year of adoption of IFRS. The main reason for those effects was the highly conservative philosophy of HGB leading to understatements of some assets (namely PPE, inventories, deferred taxes) and to an overstatement of some provisions. However, most of the German corporations had also understated pension liabilities by a large amount. The specific analysis of the IFRS effects by industry lead to similar conclusions, with some nuances: in the chemical and pharmaceutical industry effects on non-current assets and liabilities were relatively more important, whereas in the fashion industry the effects were mostly on working capital. That would be reasonable taking into account the different balance sheet expected structure of those said sectors.

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Appendix A. Some key data on selected companies

Company	DAX	Ch-Ph (2)	Fashion	Equity	Sales	Assets	Net Profit
Adidas	x		x	1.356	6.267	4.188	260
Altana	x	x		1.445	2.735	2.532	345
Bayer	x	x		12.213	28.567	37.445	-1.361
BMW	x			5.254	36.881	19.482	392
Lufthansa	x			2.653	15.957	16.732	-984
Deutsche Post	x			6.106	41.220	155	1.309
Henkel	x	x		3.311	9.436	9.362	530
Linde	x	x		3.851	8.992	11.915	108
Man	x			2.784	15.021	9.955	110
Metro	x			4.161	53.595	26.580	496
RWE	x			7.013	43.875	99.142	953
Schering	x	x		2.902	4.828	5.389	443
TUI	x			2.767	19.215	12.989	275
Volkswagen	x			24.430	87.153	119.136	1.095
Stada		x		613	745	955	44
Wella		x		655	3.312	2.519	122
Hugo Boss			x	399	1.054	755	82
Escada			x	73	621	438	-78

APPENDIX B-1

IFRS EFFECTS IN GERMAN DAX COMPANIES (million €) - RETAINED EARNINGS

	ADIDAS	ALTANA	BAYER	BMW	D. POST	HENKEL	LINDE	LUFTHANSA	MAN	METRO	RWE	SCHERING	TUI	VW	TOTAL	% effect on local RE	% effect on total Adjst	% effect on total Adjst
Year 1st aplication	*1.994*	*1.998*	*1.994*	*2.001*	*1.998*	*1.997*	*2.001*	*1.998*	*1997 / 8*	*1.999*	*1999 / 00*	*1.994*	*1997 / 8*	*2.001*			(negative)	(positive)
R E per HGB	**422**	**1.302**	**5.205**	**4.896**	**1.671**	**2.360**	**4.276**	**5.339**	**4.058**	**4.133**	**9.453**	**1.884**	**3.135**	**9.811**	**57.945**			
Goodwill		80					12			218			-831		-521	-0,9	4	
Changes in consolidated group								134							134	0,2		0
R & D, and other self devel/format exp				2.054	191		105							3.982	6.332	10,9		23
PPE-gross value		38				173				-301					-90	-0,2		0
Deprec methods			121	669	831					228	-723		1.834	3.483	6.443	11,1		24
Finance leasing (lesse)	3			306				-722		-387					-800	-1,4	7	
Finance leasing (lessor)														1.962	1.962	3,4		7
Inventories			92	691							888			653	2.324	4,0		8
Orders by completion stage							-119		185				271		337	0,6		1
AR, AP, Cash		27		169	-431	-20					274				19	0,0		0
Financial instruments other				-1.074	258		113							897	194	0,3	-2	
Pensions		-74	-274		-3.544	-312	-221	-1.088	-591	-217	-3.250	-65	-358	-633	-10.627	-18,3	87	
Other provisions/deferred income		34	28	673	1.089	5	101	202	185		313		174	2.022	4.826	8,3		18
Deferred taxes		74	17	723	835	217	89	568	347	892	2.282		-92	-1.345	4.607	8,0		17
Translation reserve			32												32	0,1	0	
Other	17			325				63	-6	-117			-92	283	473	0,8		2
Reclassifications of minority interest	-19				-229									-197	-445	-0,8	4	
RE per IFRS	**423**	**1.481**	**5.220**	**9.432**	**671**	**2.423**	**4.356**	**4.496**	**4.178**	**4.449**	**9.237**	**1.819**	**4.041**	**20.918**	**73.144**		100	100

	ADIDAS	ALTANA	BAYER	BMW	D. POST	HENKEL	LINDE	LUFTHANSA	MAN	METRO	RWE	SCHERING	TUI	VW	TOTAL
TOTAL EFFECT BY COMPANY	**1**	**179**	**15**	**4.536**	**-1.000**	**63**	**80**	**-843**	**120**	**316**	**-216**	**-65**	**906**	**11.107**	**15.199**
% EFFECT ON HGB RE	**0**	**14**	**0**	**93**	**-60**	**3**	**2**	**-16**	**3**	**8**	**-2**	**-3**	**29**	**113**	**26**

Total negative adjustments	**-12.168**
Total positive adjustments	**27.366**
	15.199

Subsequent impacts

	ADIDAS	ALTANA	BAYER	BMW	D. POST	HENKEL	LINDE	LUFTHANSA	MAN	METRO	RWE	SCHERING	TUI	VW	TOTAL
Application of IAS 36 to 38	Immaterial	Immaterial	Immaterial	N/A	Immaterial	Immaterial	N/A	Immaterial	Immaterial	N/A	N/A	Immaterial	Immaterial	N/A	**0**
Application of IAS 39	-1	7	1.434	N/A	393	13	N/A	375	0	-1	-242	96	12	N/A	**2.086**
% EFFECT ON HGB RE (1st apl. year)	0	0	27	N/A	59	1	N/A	8	0	0	-3	5	0	N/A	**3**

APPENDIX B-2

IFRS EFFECTS IN GERMAN DAX COMPANIES (million €) - IS

	ADIDAS	ALTANA	BAYER	BMW	D. POST	HENKEL	LINDE	LUFTHANSA	MAN	METRO	RWE	SCHERING	TUI	VOLKSWAGEN	TOTAL	% effect on local IS	effect on total Adjst (negative)	effect on total Adjst (positive)
	1.994	*1.998*	*1.994*	*2.001*	*1.998*	*1.996*	*2.001*	*1.998*	*1997 / 8*	*1.999*	*1999 / 00*	*1.994*	*1997 / 8*	*2.001*				
Net HGB earnings	**128**	**161**	**N/A**	**1.026**	**N/A**	**263**	**289**	**N/A**	**612**	**365**	**1.130**	**350**	**N/A**	**N/A**	**4.324**			
Goodwill		-10					-6			89					73	2		5
R&D and other intangible assets		33		236			8								277	6		18
Inventories and long term contracts-Cost of sales				69			-33		92		15				143	3		9
Deprec methods PPE		8		198		69	-17			30	411				699	16		46
Finance leasing				242						-1					241	6		16
AR/liabilities - revenue				55					-83						-28	-1	3	
Pensions						-11				-25	-111				-147	-3	13	
Other provisions		11		-485							104				-370	-9	34	
Financial instruments				56											56	1		4
Deferred taxes		-27		-186		-37	-15			-131	-154				-550	-13	50	
Income taxes (tax loss carryforward)									12						12	0		1
Forex adjustments	-5														-5	0	0	
Minority profit share	-3														-3	0	0	
Other	-3			-2			20			-22	20				13	0		1
Net earnings per IFRS	**117**	**176**		**1.209**		**284**	**246**		**633**	**305**	**1.415**	**350**			**4.735**		100	100
Net effect on P&L	**-11**	**15**		**183**		**21**	**-43**		**21**	**-60**	**285**	**0**			**411**			
% of adjustments on net HGB earnings	**-9**	**9**		**18**		**8**	**-15**		**3**	**-16**	**25**	**0**			**10**			

Total negative effects	**-1.103**
Total positive effects	**1.514**
Net effects	**411**

APPENDIX C-1

IFRS EFFECTS IN GERMAN CHEMICAL AND PHARMACEUTICAL QUOTED COMPANIES (million €) -RETAINED EARNINGS

	ALTANA	BAYER	HENKEL	LINDE	SCHERING	STADA	WELLA	TOTAL	% effect on HGB RE	% effect on total Adjst	% effect on total Adjst
Year 1st aplication	*1.998*	*1.994*	*1.997*	*2.001*	*1.994*	*2.001*	*1.999*			(negative)	(positive)
RE per HGB	**1.302**	**5.205**	**2.360**	**4.276**	**1.884**	**202**	**474**	**15.703**			
Goodwill	80			12		40		132	0,8		10
R & D, and other self devel/format exp				105		13		118	0,8		9
Deprec methods	38	121	173					332	2,1		25
Inventories/ Orders by competion stage		92		-119			-1	-28	-0,2	3	
AR, AP, Cash	27		-20			6	-61	-48	-0,3	5	
Financial instruments other				113				113	0,7		8
Pensions	-74	-274	-312	-221	-65	-1		-947	-6,0	91	
Other provisions/deferred income	34	28	5	101			-63	105	0,7		8
Deferred taxes	74	17	217	89		-4	83	476	3,0		36
Conversion reserve		32						32	0,2		2
Other						-1	31	30	0,2		2
Reclassifications of minority interest							-18	-18	-0,1	2	
RE per IFRS	**1.481**	**5.220**	**2.423**	**4.356**	**1.819**	**255**	**445**	**15.999**		100	100

	ALTANA	BAYER	HENKEL	LINDE	SCHERING	STADA	WELLA	TOTAL
TOTAL EFFECT BY COMPANY	**179**	**15**	**63**	**80**	**-65**	**53**	**-29**	**296**
% EFFECT ON HGB RE	**14**	**0**	**3**	**2**	**-3**	**26**	**-6**	**2**

Total negative adjustments	**-1.042**
Total positive adjustments	**1.337**
Net adjustments	**296**

Subsequent impacts

	ALTANA	BAYER	HENKEL	LINDE	SCHERING	STADA	WELLA	TOTAL
Application of IAS 36 to 38	Immaterial	Immaterial	Immaterial	N/A	Immaterial	N/A	N/A	**0**
Application of IAS 39	7	1.434	13	N/A	96	N/A	3	**1.553**
% EFFECT ON HGB RE (1st apl. year)	0	27	1	N/A	5	N/A	1	**10**