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**Article**

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# Quality of Disclosed Information with Emphasis on Goodwill Impairment

*Markéta Boučková\**

## **Abstract:**

This paper focuses on an analysis of the mandatory disclosure of goodwill impairment information in compliance with the international accounting standard IAS 36. The international financial reporting standards require a wide range of disclosed information concerning the goodwill impairment such as the carrying amount of goodwill allocated to the cash generating unit, determination of the discount rate applied to areas such as cash flow projections or sensitivity analysis. Prior research on disclosure requirements of goodwill impairment has shown generally low level of compliance within the selected companies.

The main goal of this paper is to find out whether companies with higher goodwill intensity disclose the information required by IFRS on the impairment of goodwill. An empirical approach consisted of analysing consolidated financial statements of selected companies listed on DAX 30<sup>1</sup> and FTSE 100<sup>2</sup>. Our sample covered 89 companies and focused on their statements from 2010 to 2013.

The results showed generally low compliance that subsequently affected the comparability of statements. The following requirements were identified as critical – determination of growth rate, disclosure of growth rate used to extrapolate cash flow projections, determination of discount rate, discount rates applied to cash flow projections and disclosure of the sensitivity analysis. These findings can be further utilized by regulators in order to increase the quality of disclosures in financial statements.

**Key words:** Goodwill; IAS 36; Goodwill impairment; Mandatory disclosure.

**JEL classification:** M40.

## **1 Introduction**

The aim of this paper is to examine the disclosed information of goodwill impairment in consolidated financial statements under IFRS. Increasing number of business combinations raised new requirements for reporting information and debate on the importance of goodwill as an asset. Goodwill impact on

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<sup>1</sup> German Stock Index (Deutscher Aktienindex) is an index of thirty major German companies whose stocks are traded on the Frankfurt Stock Exchange.

<sup>2</sup> Financial Times Stock Exchange 100 Index consists of one hundred companies listed on the London Stock Exchange with the higher market capitalization.

consolidated financial statements has risen gradually with its growing importance within companies. The interest in goodwill has generated several new streams of research – from dealing with the determination of goodwill, through its accounting and valuation, to the recent discussion of disclosed information of goodwill impairment. This subsequently led to setting accounting standards for goodwill in different countries in the world.

For many years, goodwill was seen as an asset that has been systematically amortized. The amortization regime has been criticized for not being able to capture the "real" reduction in the basic economic value of goodwill. (Van Hulzen et al., 2011). In 2001, the Financial Accounting Standards Board (FASB) published quite complex rules in SFAS 142 (Goodwill and Other Intangible Assets, FASB), which encompassed implementation of the impairment rules that at the time dramatically changed the financial accounting and goodwill reporting.

Since the year 2004 the standard IAS 36 Impairment of Assets (IASB, 2004) eliminated the traditional periodic amortization of goodwill and required instead that goodwill should be evaluated at least annually for possible impairment with write-offs if necessary.

The impairment testing puts new requirements on managers such as determination of recoverable amount of goodwill, determination of cash-generation units, discount rates estimate and growth rates appraisal (Hayn et al., 2006). IAS 36 affects the way of disclosing information of the impairment testing, which is then significantly high regardless of whether goodwill write-offs are recorded or not.

However, experience shows that companies in general are not necessarily in compliance with published accounting standards. Even when disclosures are mandatory, firms still have some flexibility in the way they report the information (Chen et al., 2000; Yeoh, 2005; Chavent et al., 2006; Tsalavoutas, 2011).

Nevertheless, as it is apparent from previous research (Healy et al., 2001), disclosures help to mitigate information asymmetry, and compliance with accounting standards enhances overall transparency. Our further analysis aims on examining compliance with international accounting standard IAS 36 that covers mandatory disclosure of goodwill impairment.

## **2 Literature Review – Relevance of Goodwill**

When studying research related to goodwill impairment, there are some relevant research streams that touch on this issue.

The first stream of goodwill impairment research is dedicated to study amortization of goodwill or impairment testing as a model that reflects the

economic substance of the asset. In contrast to IFRS, other standards prefer amortization of goodwill and therefore discuss pros and cons of the impairment approach. In his study focused on goodwill amortization, Moehrle et al. (2001) concluded that disclosure of amortization is not very useful for decision making, and therefore he suggested application of goodwill impairment instead of amortization.

The second stream of goodwill impairment research is hoping to provide evidence on association between goodwill write-offs, equity market values and firm value. Studies such as those by Alciatore et al. (1998), Francis et al. (1996), Bartov et al. (1998) also address links between write-offs and market effects.

Chauvin et al. (1994) emphasize a positive association between firm market value and reported goodwill. His research supported the opinion that the disclosed information of goodwill may be useful for investors. Published information can help investors with estimation of overall financial state of companies. McCarthy et al. (1995) also analysed the goodwill in relation to firm's market value. In sample of all firms listed in the US and recognized by US GAAP in the years 1988 to 1992 he found positive and significant relationship between their goodwill value and market value. Further research by Jennings et al. (1996) dealt with the question whether goodwill and expense numbers are related to the market value of US firms between 1982 and 1988. Their model confirmed a strong positive link between equity values and reported amount of goodwill.

The prior study of Strong and Meyers (1987) brought up the problem of possible negative market reactions to the previously announced assets write-offs. Ahmed and Guler (2007) explored relation between goodwill impairment, stock prices and stock returns and identified significant negative association between goodwill write-offs and stock returns. Then Bens et al. (2007) dealt with reactions of the market following the stream started by Strong and Meyers. They observed a significant negative reaction of stock market to the unexpected goodwill write offs. Also in case of low information asymmetry the market reaction was suppressed.

The third stream of goodwill impairment research aims to analyse disclosed information of goodwill impairment. Disclosures play a decisive role in financial reporting under IFRS. Therefore, the regulators set standards to provide figures that are more representative, faithful and lead to improved decision making and resource allocation (Kahairi, 2012). The disclosure became an extremely important issue with increasing relevance of goodwill in financial statements.

Hayn and Hughes (2006) examined ways to predict impairment based on the disclosed information in financial statements and performance indicators. The predictive ability of financial statements is limited because general indicators

relate primarily to the company as a whole rather than to a reporting unit. The study of Verriest and Gaeremynck (2009) did not show positive association between performance indicators and the level of disclosed information of goodwill impairment.

Studies that analyse disclosure of goodwill impairment in general mostly examine the association between firm attributes and disclosure quality. Francis et al. (2008) confirm the findings of Miller (2002) that the disclosures increase during period of high earnings. However, the evidence is proved just for the general corporate disclosure.

Paananen (2008) then examines the comparability of the goodwill accounting under IFRS regarding the disclosure of the impairment. His findings show, that major companies operating in the UK provide more disclosure of goodwill impairment because the environment provide high level of investors' protection.

Some studies used the goodwill intensity to explain different levels of reporting goodwill information in financial statements. Bepari et al. (2011) state the companies with higher goodwill intensity provide more detailed analysis on goodwill in the notes of their financial statements. Also, larger firms more likely disclose greater amount of information in financial statements (Churyk, 2005). The extent of disclosed information is found to be dependent on many firm-specific factors such as firm size, industry and goodwill intensity.

The literature on disclosed goodwill impairment regularly focuses on applicable accounting standard. Studies of Carlin and Finch (2010; 2011) covered relevant disclosure information according to IAS 36 in sample of 200 listed Australian companies. The results reveal that companies fail in providing information about discount rate, growth rate and specific measurements.

European Securities and Markets Authority (ESMA) conducted a fairly extensive study relating to disclosure of goodwill impairment. The research shows that the low compliance level cannot be attributed to a single disclosure requirement. Analysis of the sample revealed deficiencies in the disclosure of the key assumptions of the management in seventy percent of the studied companies. ESMA found out that more than fifty percent of companies did not disclose entity-specific information as required by standard IAS 36.

ESMA (2013) has identified five areas of concern in relation to disclosed information of goodwill impairment.

1. Sensitivity analysis – The research identified that only about fifty percent of the companies provide descriptive information about the change of key factors. The problem can be seen in the fact that the international accounting standards do not specify how the sensitivity analysis should be prepared.

2. Determination of recoverable amount – If the carrying amount of goodwill exceeds the recoverable amount the enterprise must recognize impairment loss. The companies should determinate whether they use value in use or fair value less cost to sell as the recoverable amount. The research shows that companies rather tend to calculate value in use as recoverable value. The IFRS require a wide variety of external information and internal information for actual calculation of value in use. Their findings present that the calculation in statements is insufficiently described.
3. Growth rate – Another part of research focuses on determination of growth rate indicators. It turns out that the estimates relating to future growth are too optimistic. In 2011, many companies despite the pessimistic forecasts and impacts of the financial crisis, stated growth rate of 3 %, which certainly did not match the real economic situation of financial crisis.
4. Discount rate – The selected discount rate has a relatively large impact on the calculated value of recoverable amount. Practice shows that companies prefer to use the average interest rate rather than specific rates for each cash-generating unit. In this regard, it is necessary to reflect different risk profiles of the individual cash-generating unit by using specific discount rate because the disclosed entity-specific information are relevant for understanding the firm's financial position.

These areas affect information capability of financial statements and further usability of disclosed information in the decision making process. Despite considerable efforts of regulators in relation to goodwill and business combinations it can be stated that standardization has led to greater uniformity of application of accounting methods. Still the uniqueness of the business environment will be reflected in the application itself.

Presented studies clearly demonstrate significance of the topic for companies and investors. They assist with evaluating reliability of information in financial statements and reliability of goodwill value (Douglas et al., 1991; Baginski et al, 1990). Nevertheless, some studies show that there are country-specific differences and that there exist firm characteristics that influence lack of compliance or quality of goodwill impairment disclosures. There is still a significant research gap that encompasses systematic examination of low compliance with IAS 36.

### **3 Research and Results**

This article focuses on the examination of the disclosure of goodwill information as required by IFRS. Above all, the main focus is on the disclosed information relating to goodwill impairment in accordance with the requirements of IAS 36,

where the main aim is to verify whether the investigated companies have disclosed the mandatory information or not. As expressed earlier, main research question of this article is whether the companies that have significant goodwill intensity do or do not provide necessary (mandatory) disclosed information of goodwill impairment according to IAS 36.

### 3.1 Data and Methodology

In order to answer this question, we focus on companies that are obliged to prepare consolidated financial statements in compliance with international accounting standards. Selection of companies was narrowed down to those that are quoted on major European stock exchanges and that are maintaining consolidated accounts. For the research companies from exchange FTSE 100 and DAX 30 were carefully selected based on their profile and available information. It was necessary to exclude companies which are subject to special regulation in the field of accounting and are not comparable with other sectors. In our case we excluded financial institutions, as defined by the classification of the London Stock Exchange, and those companies which are fall into the category of alternative investment market (AIM). In couple of other individual cases, we identified significant deficiencies in the financial statements that led us to subsequent elimination of these companies from our sample. These procedures have led to the sample, which consists of 89 firms and a total of 445 observations. The necessary information was obtained from financial statements of these companies from years 2010, 2011, 2012, and 2013.

**Tab. 1: Our sample – DAX30 and FTSE 100**

Index	Index composition	Samples analized	% Samples analysed
DAX 30	30	23	76,67%
FTSE 100	100	66	66,00%

Source: Authorial computation.

To test the above-mentioned research question, we decided to identify companies that have a higher intensity of goodwill in our sample. These companies are subject to a detailed analysis of disclosed information of goodwill impairment. We chose the method of comparison to present mandatory requirements of IAS 36 presented in the financial statements.

To evaluate the importance of goodwill as part of financial statement we used specific indicators presented by Holtzman et al. (2009). Goodwill intensity (GI) indicates how significant a firm's goodwill is in relation to total assets. In addition to this, we determined the intensity of goodwill in relation to a company's equity (GE).

In detail, we collected information on goodwill impairment of companies with significant goodwill intensity. These companies should disclose mandatory information as required by IAS 36. We focused on the following required information-area:

- Allocation of goodwill to cash generating units (CGUs). (1)

If the recoverable value is the value in use (VIU) or the fair value less costs to sell (FVLCTS) based on discounted cash-flow calculations, the company must disclose the following eight information areas:

- The key assumptions of management. (2)
- Determination of recoverable amount (VUI or FVLCTS). (3)
- The period for projected cash flow. (4)
- How is the growth rate determined? (5)
- Growth rate used for extrapolate cash flows projections. (6)
- Discount rate of each CGU. (7)
- How is discount rate determined? (8)
- Sensitive analysis regarding key assumptions. (9)

If goodwill impairment loss is recognized, the company must disclose four information-areas:

- Events that led to recognitions of impairment loss. (10)
- Amount of impairment loss of each CGU. (11)
- Description of each CGU. (12)
- Disclosed information about recoverable amount (VUI or FVLCTS). (13)

These disclosure requirements present the information regarding goodwill impairment test and additional information about recognized impairment loss.

### **3.2 Results**

First we identified the goodwill intensity as a ratio of goodwill to total assets (GI). The purpose of this ratio is for the materiality of goodwill evaluation in relation to a company's financial position (Bradbury, 2010); and significance of goodwill intensity can reflect the information value of goodwill disclosure. Firms with lower goodwill intensity may not pay much attention to the impairment disclosure.

Using descriptive statistics, we found out that the average intensity of goodwill (GI) for each year within our sample changed minimally. The average intensity goes from 16.74% in 2010 to 15.16 % in 2013, despite the ongoing crisis in the surveyed period the decrease of the average goodwill intensities was going very



slowly. Even the frequency of distribution in the examined period by goodwill intensity does not have greater fluctuations. This is described in Table 2.

**Tab. 2: Intensity of goodwill**

GI (%)	2013	2012	2011	2010
0-10	47	46	43	42
11-20	15	15	15	14
21-35	15	14	15	18
36-50	8	11	13	11
51-75	4	3	3	4

Source: Authorial computation.

The analysis of frequency implies that half of the companies had goodwill intensity (GI) higher than 9.8 %. The highest intensity of goodwill was found in companies that operated in the field of IT. In our sample we identified firms such as SAGE Group or SAP where goodwill represented more than half of their corporate assets.

It is necessary to observe goodwill in connection with future impairment. For this reason, we have decided to define the intensity of goodwill in relation to equity (GE). The impairment of goodwill may significantly affect the economic valuation of the company and the company devotes more attention to the mandatory disclosure. Table 3 provides more information to this.

**Tab. 3: Intensity of goodwill to equity**

GE (%)	2013	2012	2011	2010
0-10	26	26	26	27
11-20	26	13	12	7
21-40	0	12	12	14
41-60	9	8	9	11
61-75	11	11	8	9
75-90	2	5	9	6
Higher then 91	18	17	16	18

Source: Authorial computation.

In our sample we found out average GE of around 23 %. On the other hand, we identified companies where the value of goodwill exceeded the value of equity. It was especially at significantly undercapitalized companies, where potential impairment had a greater impact on financial position. Therefore, the appropriate

indicator for further research the goodwill intensity that compares the significance of firm's goodwill in relation to total assets (GI) was taken into consideration.

The above-mentioned studies show deficiencies in disclosure of goodwill information in financial statements. Necessity to disclose the information as required by IFRS is very noticeable in companies with significant goodwill. In this regard, we expected that these companies should have fully met requirements of international accounting standards for disclosure of information about goodwill impairment. In order to provide detailed analysis of mandatory disclosure of goodwill impairment we have analysed firms that have significant goodwill as firm's asset. Due to a small change in the average intensity of goodwill in the surveyed years, we decided to take the value from the year 2013. The average value of goodwill intensity 15.2 % was defined as a lower limit of goodwill significance as a corporate asset. This requirement was fulfilled by total 33 companies, of which we examined financial statements from year 2014.

The following table presents results of analysis performed on the sample, where we explored the first nine of the above-mentioned requirements (1) - (9) of goodwill impairment.

**Tab. 4: Results of analysis – general overview**

Requirements of goodwill impairment	Number of firms	% Sample
all 9 requirements meet	6	18.18 %
for 7 to 8 requirements fulfil	11	33.33 %
less ten 6 requirements fulfil	16	48.48 %

Source: Authorial computation.

Examined sample of companies showed that companies that are obliged to report information on goodwill impairment under IAS 36 have problems with some of the requirements of this standard. The requirements of IAS 36 on the publication of information on goodwill impairment are fulfilled by only 6 companies. Even though the companies with significant goodwill intensity should provide more precise information about the goodwill impairment, our findings confirm that the compliance of disclosure requirements by these companies is low. Firms that are obliged to provide information explaining the process of goodwill impairment do not provide it. These results explain the mistrust of market participants in goodwill impairment test results.

At a closer look, we find that only some of the requirements present actual challenge for disclosure. First disclosure requirements states positive results in the sample. With one exception all companies provide information about the goodwill

assigned to CGUs. The following tables describe further our results within requirements (2) - (9).

**Tab. 5: Results of analysis – requirement (1)**

Allocation of goodwill to CGUs	Number of firms	% Sample
Yes	32	96.97%
No	1	3.03%

Source: Authorial computation.

The key assumptions of management disclosed all firm except one.

**Tab. 6: Results of analysis – requirement (2)**

The key assumptions of management	Number of firms	% Sample
Yes	32	96.97%
No	1	3.03%

Source: Authorial computation.

Determination of recoverable amount was disclosed by 27 companies. The rest of companies did not provide information whether they use value in use or fair value less cost to sell as recoverable amount.

**Tab. 7: Results of analysis – requirement (3)**

Determination of recoverable amount	Number of firms	% Sample
Yes	27	81.82%
No	6	18.18%

Source: Authorial computation.

The companies also had no problem with disclosure of the period for projected cash flow. Results were the same as with previous requirement. Most companies, 24 of them, choose a period of five years for projected cash flows.

**Tab. 8: Results of analysis – requirement (4)**

The period for projected cash flows	Number of firms	% Sample
Yes	32	96.97%
No	1	3.03%

Source: Authorial computation.

The explanation how growth rates are determined was disclosed by 9 firms. The analysis demonstrated that companies neglected to state how they came to the chosen growth rate.

**Tab. 9: Results of analysis – requirement (5)**

How is the growth rate determined	Number of firms	% Sample
Yes	9	27.27%
No	24	72.73%

Source: Authorial computation.

Disclosure of the growth rate used to extrapolate cash flow projections was presented by 21 firms. Without this information the explanation of recoverable amount calculation is limited.

**Tab. 10: Results of analysis – requirement (6)**

Growth rate used for extrapolate cash flows projections	Number of firms	% Sample
Yes	21	63.64%
No	12	36.36%

Source: Authorial computation.

The specific discount rate of each CGU used for cash flows projection was disclosed by 22 firms and presents low compliance.

**Tab. 11: Results of analysis – requirement (7)**

Discount rate of each CGU	Number of firms	% Sample
Yes	22	66.67%
No	11	33.33%

Source: Authorial computation.

The requirement of discount rate determination was the most problematic. Only 19 firms fulfil this requirement. The low disclosure compliance has negative impact on the comparability of the statements.

**Tab. 12: Results of analysis – requirement (8)**

How is discount rate determinate	Number of firms	% Sample
Yes	19	57.58%
No	14	42.42%

Source: Authorial computation.

Most companies, 20 all together, did not disclose information of the sensitivity analysis. This requirement presents the low compliance with IAS 36.

**Tab. 13: Results of analysis – requirement (9)**

<b>Sensitive analysis regarding key assumptions</b>	<b>Number of firms</b>	<b>% Sample</b>
Yes	13	39.39%
No	20	60.61%

Source: Authorial computation.

The following selection deals with the disclosure requirements (10)–(13) which apply the companies that have recognized goodwill impairment. In our sample only 8 firms write off goodwill.

**Tab. 14: Results of analysis – disclosure requirements (10)–(13)**

<b>Information disclosure of impairment loss</b>	<b>Number of firms</b>
All four requirements disclosed	4
1 requirement did not disclosed	1
2 requirement did not disclosed	2
3 requirement did not disclosed	1

Source: Authorial computation.

Half of the companies with recognized impairment loss in 2014 meet the published requirements of IAS 36. On the other hand, some companies did not report the events that led to recognitions of goodwill impairment, some of them did not determinate the amount of impairment loss of each CGU.

## 4 Conclusions

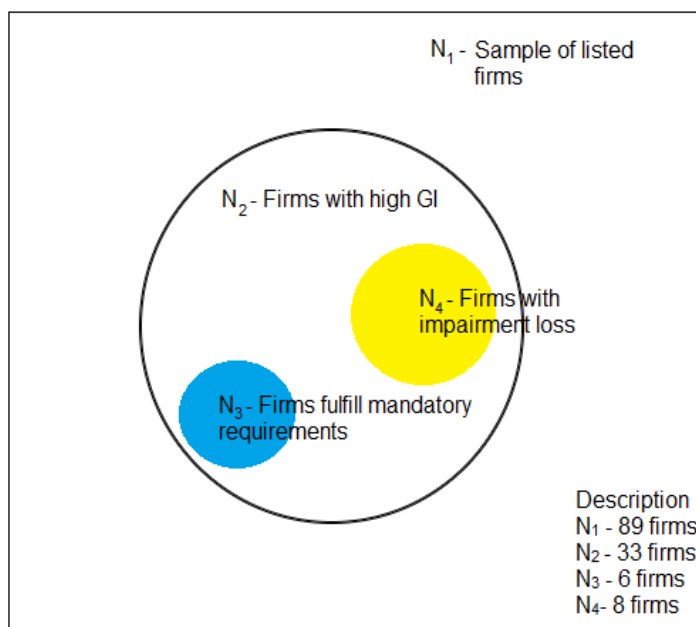
Our research provides evidence that the actual disclosure of mandatory information in compliance with IAS 36 is very low. Although we initially expected that companies with significant goodwill intensity fulfil the requirements of IFRS, our findings did not confirm it. Only 18.18 % firms from our sample disclosed the mandatory information of goodwill impairment. Moreover, the results have shown that the most problematic requirements are connected with calculation of recoverable amount. Only 27.17 % firms of our sample determinate the growth rate for cash flows projections. Disclosure of sensitivity analysis was identified as one of the most problematic requirements.

The firms that comply with disclosures required by IAS 36 did not recognize goodwill impairment in the year 2014. The recognition of impairment loss did not lead to compliance with the disclosure requirements of goodwill impairment under IFRS in the sample. Half of the companies that wrote off goodwill in the investigated year reported the mandatory information about impairment loss.

Based on the analysed sample, we may conclude that the main shortcomings of the studied companies are related to the information containing detailed description and specific management estimates. Especially this type of information is a basis for future decision-making of potential investors considering their investment in the particular company stocks. Accordingly, the possible real effect of IAS 36 is significantly limited by companies failing to comply fully with the mentioned IFRS disclosure requirements.

Low compliance in the sample is surprising because the examined statements are subject to audit. The very essence of audit is that audits generally should establish certain level of information quality when applied. However, in the cases studied, audits failed in terms of expressing realistic view on firms' information. Figure 1 provides depiction of the research results.

**Fig. 1: Diagram presenting the research findings**



Source: Authorial computation.

Future direction of the research could encompass addressing a detailed analysis of mandatory requirements from the perspective of the companies' expectations. This potential future research can help with identification and exploration of the reasons behind low quality of the financial statements and further extend our knowledge in this area.

## References

- Accounting Standards Board, 2013. Financial Reporting Standard 10, Goodwill and Intangible Assets.
- Accounting Standards Board, 2013. Financial Reporting Standard 11, Impairment of Fixed Assets and Goodwill.
- Ahmed, A., Guler, L., 2007. Evidence on the Effects of SFAS 142 on the Reliability of Goodwill Write-offs. Working Paper, Texas A & M University.
- Alciatore, M., Dee, C. C., Easton, P., Spear, N., 1998. Asset Write-Downs: A Decade of Research". *Journal of Accounting Literature* 17, 1-39.
- Baginski, P., Hassell, M., 1990. The Market Interpretation of Management Earnings Forecasts as a Predictor of Subsequent Financial Analyst Forecast Revision". *The accounting review* 65, 175-190.
- Bartov, E., Lindahl, F. W., Ricks, W. E., 1998. Stock Price Behaviour Around Announcements of Write-Offs. *Review of Accounting Studies* 3, 327-346.
- Bens, D. A., Heltzer, W., Segal, B., 2007. The Information Content of Goodwill Impairment and the Adoption of SFAS 142. Working Paper, University of Arizona.
- Bepari, M. K., Rahman, S. F., Mollik, A. T., 2011. Compliance with IFRS for Goodwill Impairment Test and Firm Characteristics Affecting It. Working Paper, American Accounting Association Annual Meeting, Denver, Colorado.
- Bradbury, M., 2010. Commentary: Discount Rates in Disarray—Evidence on Flawed Goodwill Impairment Testing. *Australian Accounting Review* 20, 313-316.
- Carlin, T. M. and Finch, N., 2010. Evidence on IFRS Goodwill Impairment Testing by Australian and New Zealand Firms. *Managerial Finance* 36, 785-798.
- Carlin, T. M, Finch, N., 2011. Goodwill Impairment Testing under IFRS: A False Impossible Shore? *Pacific Accounting Review* 23, 368-392.
- Douglas, W., Diamond, R., Verrecchia, E., 1991. Disclosure, liquidity and the cost of capital. *The journal of finance* 46.
- ESMA, 2013. ESMA report: European enforcers review of impairment of goodwill and other intangible assets in the IFRS financial statements. Available from: <<http://www.esma.europa.eu/system/files/2013-02.pdf>>. [21 April 2016].
- Francis, J., Hanna, J., Vincent, L., 1996. Causes and Effects of Discretionary Asset Write-offs. *Journal of Accounting Research* 34, 117-134.
- Francis, J., Nanda, D., Olsson, P., 2008. Voluntary Disclosure, Earnings Quality, and Cost of Capital. *Journal of Accounting Research* 46, 53-99.

- Hayn, C., Hughes, P. J., 2006. Leading Indicators of Goodwill Impairment. *Journal of Accounting, Auditing & Finance* 21, 223-265.
- Healy, M., Palepu, K., 2000. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31, 405-440.
- Holtzman, M. P., Sinnett, W. M., 2009. Goodwill impairments. Report of Director of Research Financial Executives Research Foundation and Duff & Phelps.
- Chauvin, K., Hirschey, M., 1994. Goodwill, Profitability, and the Market Value of the Firm, *Journal of Accounting and Public Policy* 13, 159-180.
- Chavent, M., Ding, Y., Fu, L., Stology, H., Wang, H., 2006. Disclosure and Determinants Studies: An Extension Using the Divisive Clustering Method (DIV). *European Accounting Review* 15, 181-218.
- Chen, C. J. P., Jaggi, B., 2000. Association between independent non-executive directors, family control and financial disclosures in Hong Kong. *Journal of Accounting and Public Policy* 19, 285-310.
- Churyk, N. T., 2005. Reporting Goodwill: Are the New Accounting Standards Consistent with Market Valuations? *Journal of Business Research* 58 1353-61.
- Jennings et al., 1996. The Relation Between Accounting Goodwill Numbers and Equity Values. *Journal of Business, Finance and Accounting* 6, 513-533.
- Kahairi, K., Laili, N., Tran, M., 2012. Disclosure Quality of Goodwill Impairment Testing: A Disclosure Index. *Journal of Economics and Development* 14, 5-30.
- Miller, G. S., 2002. Earnings Performance and Discretionary Disclosure. *Journal of Accounting Research* 40, 173-204.
- McCarthy, M. G., Schneider, D. K., 1995. Market Perception of Goodwill: Some Empirical Evidence, *Accounting and Business Research* 26, 69-81.
- Moehrle, S. R., Reynolds-Moehrle, J. A., Wallace, J. S., 2001. How Informative are Earnings Numbers that Exclude goodwill Amortisation? *Accounting Horizons* 5, 243-255.
- Paananen, M., 2008. Fair Value Accounting for Goodwill under IFRS: An Exploratory Study of the Comparability in France, Germany and the United Kingdom. Working Paper, University of Hertfordshire.
- Strong, J. S., Meyers, J. R., 1987. Asset write-downs: Managerial incentives and security returns. *Journal of Finance* 42, 643-661.
- Tsalavoutas, I., 2011. Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal? *Advances in Accounting, incorporating Advances in International Accounting* 27, 390-405.



Van Hulzen, P., Alfonso, L., Georgakopoulos, G., Sotiropoulos, I., 2011. Amortization Versus Impairment of Goodwill and Accounting Quality. *International Journal of Economic Sciences and Applied Research* 4, 93-118.

Verriest, A., Gaeremynck, A., 2009. What Determines Goodwill Impairment? *Review of Business and Economics* 2, 106-128.

Yeoh, J., 2005. Compliance with mandatory disclosure requirements by New Zealand listed companies. *Advances in International Accounting* 18, 245-262.