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Definitions

IASB – International Accounting Standard Board

IFRS – International Financial Reporting Standard

IASC – International Accounting Standard Committee

IAS – International Accounting Standard

NASDAQ OMX Stockholm – The stock market in Sweden

Large cap – A list for large companies listed on the Swedish stock market

Mid cap – A list for medium sized companies listed on the Swedish stock market

Small cap – A list for small companies listed on the Swedish stock market

CGU – Cash Generation Unit

RR – Redovisnings Rådet

Big Four – The four largest auditing firms: PwC, Deloitte, KPMG and EY

1 Introduction

1.1 Background

International Accounting Standard Board (IASB) is an independent standard-setting organization that issues globally accepted standards, known as the International Financial Reporting Standards (IASB, 2015). The organization was formed in 2001 in London, UK, emerging from a reconstruction of International Accounting Standard Committee (IASC), which was established 1973 (Ball, 2006). Today the framework of International Financial Reporting Standards (IFRS) is applied by at least 120 countries around the world (IASB, 2015).

Since year 2005, publicly traded companies in the European Union are required to report in accordance with the framework of IFRS. The purpose with implementation of IFRS was to ensure a more harmonized and comparable financial reporting framework across Europe (European Parliament, EC Regulation, No 1606/2002). The transition to IFRS caused different accounting areas to change in several countries, the accounting of goodwill was one of these changing areas (Chalmers, Godfrey & Webster, 2011). Goodwill is defined as an asset that reflects the future economic benefits generated by other assets acquired in a business combination. Furthermore, the asset can neither be identified individually nor recognized separately (European Commission, IFRS 3, 2011).

The issue of goodwill treatment has passed through several phases over time (Seetharaman, Sreenivasan, Sudha & Yee, 2006). The adoption of IFRS in 2005 implied that goodwill and other intangible assets with an indefinite useful life was no longer depreciated on a straight-line basis. These intangibles shall instead be tested for impairment on an annual basis. Provisions on the disclosure of the goodwill impairment test are stated in IAS 36 (Busiman, 2006). Companies are required to disclose an impairment loss if the carrying amount of the goodwill exceeds its' recoverable amount. The recoverable amount reflects the highest of the fair value less cost to sell and the value in use (European Commission, IAS 36, 2010). The impairment tests are usually based upon discounted cash flows, which involves subjective judgments. The requirements in IAS 36, regarding the disclosure of goodwill impairment, was created to clarify the uncertainty and subjectivity in the calculations made by the management (Busiman, 2006).

Committee of European Securities Regulators (CESR) conducted a study to investigate the compliance level with IFRS and concluded that the most problematic areas concerned the goodwill impairment test as well as the reporting of business combinations (Glaum, Schmidt, Street & Vogel, 2013). European Security and Markets Authority (ESMA) also reported various concerns associated with goodwill impairment, these involved the reliability of the impairment tests, poor disclosure of the underlying assumptions for the tests as well as disclosures of boilerplate nature. The chairman of IASB, Hans Hoogervorst, further stated that companies tend to recognize goodwill impairment losses too late in time during periods of economic uncertainty (ESMA, 2013).

Duff & Phelps (2014) presented that the European companies during year 2013 reported impairments of goodwill corresponding to an amount of 49, 6 billion, which equals a percentage of 31, 3. In this year, 87, 6 % of the companies in the study had a goodwill item in their balance sheet. One of the industries with the highest goodwill/total asset - ratio in year 2013 turned out to be the information technology sector, where goodwill accounted for an average of 23, 6% of the total assets. Duff & Phelps (2014) further states that the possibility of impaired assets increases in periods where the economy experiences uncertainties, hence, the expectations of the cash inflows decreases. When the market capitalization of the company falls below its' book value, the entity should consider testing the goodwill item, since it is an indication of the asset to possibly be impaired. This partially explains why standard-setters and other influential bodies have in recent years put a great focus on goodwill impairment, as well as goodwill in general (Duff & Phelps, 2014).

1.2 Problem Discussion

Reporting in accordance with IFRS has been identified as one of the most difficult areas in practice and the understandability of the disclosures may suffer as a consequence of the complexity of the standards (Hoogendoorn, 2006). Goodwill has over a long time been a controversial topic (Carlin & Finch, 2009). The topic has generated debate for several decades, focusing on the treatment of goodwill and whether it should be recognized as an asset in the balance sheet. Moreover, the discussions have focused whether the capitalized amount of goodwill should be subject to amortization or impairment, in order to best reflect the value of the asset. In the opinion of IASB, goodwill should be

subject to impairment testing as it better presents the economic value of goodwill (Chalmers et al., 2011).

Goodwill emerges from a business combination and the asset can therefore neither be purchased separately nor recognized without an acquisition to take place (Seetharaman et al., 2006). Mergers and acquisitions are seen as the largest investment activities that companies undertake (Shalev, 2009). Both IFRS 3, which regulates business combinations and IAS 36, which treats impairment of assets, states that acquired assets and liabilities should be recognized at a fair value. The transition to fair value accounting in 2005 implied a greater scope of managerial judgments in the assessment of the intangible assets' fair value (Lhaopadchan, 2010).

Phelps & Duff (2014) reported that the amount of goodwill in relation to total assets for some industries accounted for a number as high as approximately 20 %. With an increasing importance of intangible assets and a growing proportion of intangibles in relation to total assets, the disclosure towards the public becomes even more essential since it enables the users to assess and evaluate the acquisition. The level of disclosures tends to increase when the management expects the acquisition to be successful in adding value to the company and decreases when the value is uncertain (Shalev, 2009).

Disclosures of the impairment test are highly associated with management discretion, hence, could fail in providing valuable information to the users (Bepari, Rahman & Mollik, 2014). Goodwill has an intangible nature, which implies that the definition and recognition in the financial reports are highly dependent on how the management has treated the impairment of goodwill (Seetharaman et al., 2006). The estimations of the impairment test lies within the control of the management and the incentive to manipulate the numbers, when necessary, are present for the companies (Lhaopadchan, 2010). The room for manipulation gives the management an opportunity to decide upon what information to disclose (Charlin & Finch, 2009). This stresses the importance of transparent disclosures as it gives the users an opportunity to assess the reliability of the assumptions in the test (Glaum et al., 2013).

Ji (2013) investigated if the reported impairment losses kept the same level as expected during times of financial crisis, the results indicated that the actual impairment losses were below the expectations. The author further concluded that companies tend to re-

port delayed impairment losses and, if possible, they completely ignored to report about the loss. With an insufficient disclosure level, users faces difficulties in assessing the reliability of the underlying key assumptions in the impairment tests (ESMA, 2013).

Disclosure of information is seen as an essential tool for the capital market to work at its full potential (Healy & Palepu, 2001). The major source to financial information is considered to be companies' financial statements and the information that is revealed forms the basis for the decisions taken by the investors (Devalle & Rizatto, 2013). Reporting and disclosure of information serves as a communication channel between the management and the public regarding the behavior of the company (Healy & Palepu, 2001). Although the standard of IAS 36 requires certain information to be disclosed, companies may consider to not revealing information that would serve them as a competitive disadvantage (Clinch & Verreccia, 1997). Carlin & Finch (2009) further stated that the level of disclosure in practice deviate significantly from the level of information required by IAS 36. Hoogendoorn (2006) supports this statement by classifying impairment testing and the activity of revealing information as two of the most complex issues in practice. This implies that the disclosure issue is still in need of improvement (Busiman, 2006).

In a study of Swedish listed companies, it was found that goodwill corresponded to an average of 52 % of the purchasing price of the acquisitions (Gauffin & Nilsson, 2006). The research showed that goodwill represents an undeniably large portion of the purchase price, which is subject to annual impairment testing. The interest of the topic arises therefore from the importance of goodwill together with a combination of the reporting complexity in IAS 36 and the attempts by the management to avoid impairment losses.

1.3 Research Questions

The standard IAS 36, *Impairment of Assets*, contains detailed guidelines on the mandatory disclosure requirements. The provisions within the standard require specific information to be disclosed regarding the performed impairment test, such as the underlying assumptions for the estimation of the value of goodwill. The impairment test of goodwill involves managerial judgments, which could influence the reliability of the test.

Managements' incentive to assign goodwill with a number that is favorable for themselves or for the company's economic wealth is put under pressure in the impairment test. The disclosures of the assumptions and the estimations in the tests are therefore substantial and leads to the following main research question:

Main Research Question - To what extent do Swedish listed companies comply with the disclosure requirements stated in IAS 36?

Previous studies have investigated the relationship between companies' compliance level and various company characteristics. Similar variables have been used in the studies, however, the characteristics have varied in number. The studies has taken a broad perspective and included numerous variables, which gives the impression that the degree of compliance is not determined by one single factor but rather of multiple variables. This study will limit the number of variables to size, age, audit firm and industry since these factors have frequently been used in other studies. The first- and the second sub-question will therefore be structured as follow:

Sub-Question 1 – How does the size of the companies affect the disclosure level?

Sub-Question 2 – Is the age, audit firm and industry equally influential as the size in terms of disclosure level?

1.4 Purpose

The main purpose of the thesis is to investigate, from the public's perspective, to what extent the Swedish listed companies comply with the requirements in IAS 36, regarding the disclosure of goodwill impairment. The public's perspective mainly refers to the users of the financial reports. The study also aims at assessing which factors that influences the degree of disclosure. Among all variables that will be examined, an extra focus will be devoted to the size-variable.

1.5 Delimitations

The investigation is restricted to Swedish companies, listed on *NASDAQ OMX Stockholm*. The study will not cover all Swedish listed companies, only the ten largest entities within the large cap-, mid cap- and small cap list will form the final sample. Due to this

limitation, the investigation may take a longer time perspective. The study will cover a time frame of nine years, more specifically the years 2005-2013. Only the companies with a recognized goodwill item in their balance sheet, during year 2005-2013, are therefore relevant. When answering the main research question, focus will be put on the disclosure requirements in paragraph 134. However, requirement B in paragraph 134 will be excluded since it treats all intangible assets and not goodwill in particular. Moreover, the study will only consider purchased goodwill, emerging from acquisitions. This implies that both internally generated goodwill and negative goodwill will be excluded. The collection of data will be restricted to companies' annual reports, focusing on the goodwill impairment notes.

1.6 Thesis Outline

The thesis will be organized as follow: The frame of reference chapter will highlight some of the previous studies within the goodwill field as well as certain related theories. Key concepts related to the subject will be explained in detail. In the methodology chapter, appropriate methods will be presented and motivated and the procedure of data collection will be addressed. The empirical chapter will present the findings of the study and an analysis of these findings will be found in the next chapter, where the results will be connected to the theories. Finally, a concluding and discussing section will take place, including the authors' reasoning and suggestion for further research.



2 Frame of References

2.1 Characteristics of an Asset

The resources that companies possess, which are used in adding value to the entity, are commonly referred to as assets. In general, assets arise through two different ways, companies either produce them by themselves or acquire them. However, alternative approaches may be used to generate assets (IASB Conceptual Framework, 2010). IASB defines an asset as a resource that is controlled by the company and which is expected to generate future economic benefits to the firm (Mackenzie et al., 2013).

There are two recognition criteria for an asset. The first criteria imply that it must be likely for the company to obtain the future economic benefits of the asset (IASB Conceptual Framework, 2010). An enterprise may enjoy its future economic benefits through different ways, such as, obtaining revenues from the disposal of an asset, reducing its costs or possessing a significant benefit that results from the usage of the asset (Mackenzie et al., 2013). The second recognition criteria of an asset require the company to be able to measure the value or the cost of the asset in a reliable way (IASB Conceptual Framework, 2010).

Assets are usually classified into two categories, namely tangible- and intangible assets (Abu Bakar & Ahmad, 2010). Resources that are tangible possess a physical nature and have the ability of generating future economic benefits (Yallwe & Buscemi, 2014). The recognition criteria for tangibles are limited to the content of IASB's definition of an asset, which comprises of the control- and the future economic benefit requirements (IASB Conceptual Framework, 2010). Equipment and plant are examples of tangible assets. Resources that lack physical substance but which generate future economic benefits are commonly referred to as intangible assets (Yallwe & Buscemi, 2014). Software, patents, and trademarks are examples of assets within this category (Stolowy & Jeny-Cazavan, 2001). In addition to the control- and future economic benefit requirement that applies for the tangible assets, intangibles must be identifiable. An asset is seen as identifiable when it is possible to separate it from the company or when its emergence arises from a contractual or legal right (European Commission, IAS 38, 2010). Goodwill is an asset, which neither can be identified nor recognized separately

(Victor, Tinta, Elena & Ionel, 2012). Therefore, IAS 38 does not apply to acquired goodwill, the asset is instead treated in IFRS 3, *Business Combinations* (European Commission, IAS 38, 2010).

2.2 Goodwill

Goodwill is seen as a highly controversial asset, partly due to its vague definition (Izzo, Luciani & Sartori, 2013). Goodwill simply represents the difference between the purchase price and the net assets acquired in a business acquisition (Hamberg & Beisland, 2014). The asset reflects the future benefits that the company expects to enjoy from the acquisition, which cannot be assigned to a certain asset (Churyk & Cripe, 2011).

Goodwill is normally split into two different groups, internally generated goodwill and purchased goodwill (Bloom, 2009). The importance of purchased goodwill is increasing in the market (Shalev, 2009). Accounting bodies treat these two groups differently by only allowing the recognition of purchased goodwill (Bloom, 2009). Under the regulation of IFRS, internally generated goodwill does not meet the recognition criteria of an intangible asset and is therefore not capitalized (Mackenzie et al., 2013). However, this prohibition does not apply for purchased goodwill (Bloom, 2009), which is the type of goodwill that is relevant for this study.

2.2.1 Accounting Treatment of Goodwill

The implementation of IFRS led to a shift in the accounting treatment of goodwill (Chalmers et al., 2011). The treatment of goodwill over time can be summarized by three different viewpoints. The first viewpoint proposes to fully depreciate the goodwill value against the company's equity. The second viewpoint argues that goodwill should be depreciated over its useful life. The depreciation value should be presented in the same year as the asset has generated profits for the company. Lastly, the third view suggests that goodwill, emerging from a business combination, has an indefinite useful life and should therefore be tested for impairment on a regularly basis (Jahmani, Dowling & Torres, 2010).

The Swedish accounting body, Redovisningsrådets Rekommendationer (RR), has earlier regulated the treatment of goodwill. Under this regulation, goodwill was recognized

at cost less accumulated depreciations and impairment losses. The asset was depreciated over its estimated useful life, which could not exceed a period of twenty years. If an indication of impairment existed at the balance sheet date, the recoverable amount of goodwill was estimated through an impairment test and the impairment loss was recognized against the company's income. RR further permitted the reversal of prior impairments, under certain circumstances. The treatment of goodwill is today regulated by IFRS and the asset is instead recognized at cost less accumulated impairment losses. Goodwill is no longer amortized, the asset should instead be tested for impairment on an annual basis. When an indication of impairment exists, an impairment test shall be carried out immediately, otherwise, the asset is tested annually. Under the current regulation, reversals of prior impairments are prohibited (Persson & Hultén, 2006). IASB claims that the new treatment of goodwill is more successful in providing useful information compared to prior regulation (Chalmers et al., 2011).

Under the new regime of IFRS, purchased goodwill must be distributed to a cash generating unit (CGU) (Wines, Dagwell & Windsor, 2007). This is due to the inability of testing goodwill separately (Petersen & Plenborg, 2010). IASB defines a CGU as the smallest group of assets, which provides cash flows independently from other asset's cash flows (Mackenzie et al., 2013). The allocation of goodwill to CGUs shall reflect the expected benefits for each of the CGUs, arising from the synergies. However, the distribution process is associated with difficulties (McDonnell, 2005). These difficulties partly involve to correctly addressing the goodwill value to an appropriate CGU that is expected to benefit from the synergy (PwC, 2006).

Impairment tests reflect the procedure used by the company to avoid an overestimation of their assets (Izzo et al., 2013). The first step of the impairment test involves an estimation of the CGU's recoverable amount, to which the goodwill has been allocated. A CGU's recoverable amount is the higher of its fair value less cost to sell and its value in use. The fair value less cost to sell represents the amount that would be received from an exchange of the asset in an arm's length transaction, reduced with the cost of selling it. The value in use is estimated by transforming the expected future cash flows of the asset or the CGU into present value (Wines et al., 2007). Once the recoverable amount of the CGU has been determined, this value shall be placed in relation to its carrying amount (Carlin & Finch, 2009). The carrying amount of an asset represents the remain-

ing value in the balance sheet after a deduction of accumulated amortizations and accumulated impairment losses (Mackenzie et al., 2013). If the carrying amount exceeds the recoverable amount, the difference in value is considered to be impaired. The CGU's carrying amount shall then be written down to its recoverable amount (Carlin & Finch, 2009). The impaired value is recognized as a cost in the income statement (Churyk & Cripe, 2011).

2.2.2 Disclosure of Goodwill Impairment

Disclosure is seen as an essential issue due to its ability of impacting the investors' behavior. The information that companies reveal further supports the economic decisions taken by the investors (Devalle & Rizatto, 2013). It is therefore essential for an entity to review the disclosure criteria in IAS 36 to ensure that appropriate and useful information is revealed to its owners. The standard requires the information of the impairment test to take a business-related approach rather than being prepared in a generic way (Izzo et al., 2013).

IAS 36 is a principle-based standard (Agoglia, Doupnik & Tsakumis, 2011), which contains, in paragraph 134, provisions on what an entity is expected to disclose for each of the CGUs. Companies should present the estimated carrying amount of the goodwill or other intangible assets with an indefinite useful life, which has been distributed to a CGU or groups of CGUs. Entities also have an obligation to disclose the basis for the recoverable amount of the CGU, more specifically, whether they have used fair value less cost to sell or value in use in the estimations. Depending on which base the recoverable amount uses, there are different disclosure criteria that must be met.

If the recoverable amount of the CGU is based on the value in use approach, companies are required to reveal information about the key assumptions that supports how the future cash flows of the CGU has been calculated. Key assumptions are basically those assumptions that the recoverable amount of the CGU is most likely to react upon. Moreover, a description of how the values of the key assumptions have been estimated and whether these values reflect prior experience or external information sources must be provided. If the values deviate from both past experience and external information sources, a motivation for the deviation is required as well as an explanation on how the

values differs. The time frame in which the cash flows of the CGU have been projected must be indicated and if the period is greater than five years, a motivation must be given. Further, both the discount rate and the growth rate used in the estimation of the cash flows must be stated (Devalle & Rizzato, 2012; FAR Akademi, 2013).

If the fair value less cost to sell is instead applied in the estimation of the recoverable amount and if this value is not based upon a quoted price for an identical CGU or CGUs, additional information needs to be disclosed on this matter. Likewise the value in use approach, this method requires the key assumptions to be presented as well as the method used to determine the values of the key assumptions. An explanation of whether the values are assessed in accordance with prior experience or external information sources is also required (European Commission, IAS 36, 2010). In addition to the criteria stated for the value in use approach, this method requires the entities to state to which level the CGU's estimated value relates to in the fair value hierarchy (Izzo et al., 2013). The definition of the fair value hierarchy can be found in IFRS 13 and it comprises of three different levels. Further, if the valuation technique has changed, companies must inform about this and state the difference in value together with a motivation for the change. If the fair value less cost to sell is estimated by discounted cash flow projections, information about the time period, the growth rate and the discount rate is required to be revealed (FAR Akademi, 2013).

If there exists a reasonable possibility of the key assumption to change, which will cause the carrying amount of the CGU to be greater than its recoverable amount, companies are obliged to disclose the surplus. Further, information of the key assumption values must be available as well as the required change in order for the carrying amount to correspond to the recoverable amount (FAR Akademi, 2013; European Commission, IAS 36, 2010).

2.3 Qualitative Characteristics of Accounting

IASB's conceptual framework presents certain qualitative characteristics, which entities are expected to apply in the preparation of the financial reports, in order to ensure that useful information is provided (Mackenzie et al., 2013). These characteristics are essential for solving the problems that could arise in the investors' decision-making processes

(Christensen, 2010). The characteristics are categorized into two different groups, namely fundamental qualitative characteristics and enhancing qualitative characteristics. The fundamental characteristics consist of two concepts, relevance and faithfulness. Comparability, verifiability, timeliness and understandability are the four remaining characteristics, which are known as the enhancing qualitative characteristics (Mackenzie et al., 2013).

2.3.1 Fundamental Qualitative Characteristics

One of the fundamental characteristics within IASB's conceptual framework is relevance. According to IASB, information is seen as relevant when it has the ability to influence the decision process, which occurs when the information possesses a predictive value, confirmatory value or a combination of both. Information with a predictive value involves details that may be useful in foreseeing future outcomes. If the information instead provides response to prior evaluations, it is said to have a confirmatory value (IASB Conceptual Framework, 2010). Another characteristic within this group is faithful representation, which simply states that the information shall represent what it intends to. This characteristic is built upon three different key terms, namely complete, neutral and free from error. The term complete implies that no information should be excluded if it is necessary for a full understanding. Neutral information means that the information should not be biased. Lastly, free from errors involves no exclusion and errors in the revealed information (Mackenzie et al., 2013).

2.3.2 Enhancing Qualitative Characteristics

Among the group of enhancing qualitative characteristics, four concepts can be found. The first characteristic is comparability, which allows for differences and similarities to be observed between the items. Consistency further enhances the comparability among entities and encourages companies to use similar principles and processes, either from one calendar year to another or across companies within a certain year. Verifiability is a concept used to ensure a true and fair view of companies' economic situation. The concept implies that independent parties must be able to obtain a general agreement upon the information to be free from bias and material errors, which is done by achieving similar measures and conclusions (Mackenzie et al., 2013). Another enhancing charac-

teristic is timeliness, which requires the information to be disclosed in time in order for the users to make decisions based upon updated information (IASB Conceptual Framework, 2010).

The framework of IASB further requires the information to be understandable. This characteristic highlights the importance of providing information that is classified and characterized in a clear and concise manner. The information should make it possible for the users to gain an understanding of the company, under the condition that they possess reasonable knowledge of businesses and financial reporting (Mackenzie et al., 2013).

2.4 Previous Research

Several countries have made reporting in accordance with IFRS compulsory (Christensen, Hail & Leuz, 2013). This was the result of EC's requirement on European countries to prepare their financial statements in line with IFRS, from year 2005 and onwards (Glaum et al., 2013). Due to the changing accounting regime, comprehensive investigation has been conducted in this matter (Christensen et al., 2013).

Previous studies have looked at the issue of goodwill impairment from different angles. Glaum & Street (2003) examined the compliance level among German listed companies in year 2003. At this point in time, both the framework of IASB and US GAAP was allowed to use. The authors concluded that companies experienced difficulties in complying with both the standards of IASB and US GAAP. Glaum et al. (2013) made an investigation of the leading companies in Europe in the same year as the implementation of IFRS, to assess the compliance level with the disclosure criteria in both IFRS 3 and IAS 36. The investigation proved that the level of non-compliance were significant among the European leading companies. The authors further proposed that the countries' enforcement systems, the ownership structure, auditor and industry-type were crucial factors for the disclosure level. Similarly, Devalle & Rizzato (2013) aimed at verifying the quality of the disclosures in line with IFRS 3 and IAS 36, as well as the determinants of the compliance level. However, this study was limited to Italian listed companies and it sought to investigate the influential variables on the quality of the disclosures. The outcome of the research was consistent with the work of Glaum et al. (2013), which found out that the compliance level was substantially poor. Devalle & Rizzato (2013) on the

other hand identified entity size and performance variables as the two most influential factors, when it comes to the disclosure level. Wallace, Naser & Mora (1994) performed a study of listed firms in both Valencia and Madrid to investigate which variables that could impact the disclosure level. The impacting variables turned out to be the size and the listing status, while the audit firm and the industry-type were not considered to be associated with the compliance level.

Another study that was performed by Devalle & Rizzato (2012) sought to answer whether the European countries succeeded in providing the information that was required by IFRS. The notes in companies' consolidated financial statements, for the year 2010, served as a basis for the examination and the investigation was performed five years after the study of Glaum et al. (2013). The outcome showed that the compliance with IAS 36 was still insufficient among the European companies, even after five years. More specifically, only 27 % succeed in disclosing the required information and the least informative area turned out to be the sensitivity analysis.

Many researchers have found it interesting to examine the impact of the financial crisis on the disclosures of goodwill impairment; however, the studies have looked at the issue in different contexts. Izzo et al. (2013) observed Italian listed companies during 2007-2011, with an effort to determine whether the financial crisis affected companies' disclosure levels. Italy was selected with the motivation of being the country that had the most impaired assets during 2011. The results showed that the disclosure level was incomplete over the entire period, but with an indication of improvement. The companies did not prefer full compliance since it could result in higher costs than benefits. Camodeca, Almici & Bernardi (2013) contributed with another study during 2007-2011, but in the context of UK companies. The research focused on comparing the disclosures of the impairment test and to examine the estimations of the recoverable amount. Poor disclosures of the key assumptions used in the estimation of the recoverable amount were found, particularly after the financial crisis. Bepari et al. (2014) observed, among the Australian companies, an improving pattern of disclosures during the global crisis compared to pre-crisis period. The findings were obtained from an investigation conducted in 2008-2009 and indicated that the compliance level varied across companies due to certain firm-specific factors, such as, the audit quality, materiality of goodwill and profitability of companies.

Ji (2013) observed Australian companies during 2007-2009, with an attempt of assessing whether the entities avoided or intentionally reported about the goodwill impairment too late in time, although indications of impairment exist. Poorly performing units within the entities were found to report about goodwill impairments more often than those units that performed better and it was clear that companies avoided to disclose about the impairment losses. Delayed reporting of the losses was also evident for Australian companies during this time. Further, the losses did not correspond to the calculations made in the study, they were both lower in value and in number. The chairman of IASB, Hans Hoogervorst, confirms the findings of Ji (2013) by stating that the impairment losses often were delayed during times of financial crisis (ESMA, 2013).

Hjelström & Schuster (2011) studied the implications of the IFRS adoption among Swedish companies in 2005. The findings support many other studies, which have identified a low level of compliance with IAS 36. The study concluded that the least informative areas concerned the assumptions used in the impairment test. This was explained with companies' reluctance of revealing sensitive information. Furthermore, the reporting entities were eager of observing how other firms coped with the new requirements before they fully complied with the standard. A more extended research was performed by Hartwig (2013), which aimed at assessing the extent of disclosures by Swedish and Dutch companies. Likewise Hjelström & Schuster (2011), Hartwig (2013) reviewed the financial reports of 2005 but also year 2008. The research findings suggested that in 2005, Swedish companies complied with the standard to a larger extent than Dutch companies. For the second investigation year, an improvement for both countries could be seen, which indicated learning. The two countries had corresponding compliance levels in year 2008.

Additional studies within the goodwill field were performed by Petersen & Plenborg (2010) in year 2006, which investigated how the Danish companies identified a CGU. Danish companies seemed to keep a low level of compliance with the disclosure requirements in IAS 36 and some of the entities failed to define the CGUs. Hoogendoorn (2010) further emphasizes the difficulties of defining a CGU and estimating the CGU's recoverable amount by ranking them as some of the most problematic areas to tackle in practice.

Carlin & Finch (2011) observed the disclosures of Australian companies one year after the adaption of IFRS. The aim of the study was to determine whether companies revealed the type of information that was required by the standard. The research indicated partial compliance among Australian companies, where the missing disclosures concerned the distribution of goodwill, the growth rates and the discount rates used in the estimation process.

2.5 Disclosure Theory

Corporate disclosure deals with how the management communicates the performance of the company towards its external parties (Haley & Palepu, 2001). Managers usually possess better access to company information. Hence, investors do not have the same possibility as the management in assessing the profitability of different investment activities, which results in information asymmetry (Beyer, Cohen, Lys & Walther, 2010). Timely, transparent and credible information enables market operators to verify the decisions taken by the management, thus, corporate reporting is considered to be an effective tool in reducing the information asymmetry between the two parties (Glaum et al., 2013). Disclosures that does not contribute to an increased understanding has not succeeded in fulfilling its purpose (ESMA, 2013).

The demand for disclosures and financial information emerges from unequal access of company information. When the scope of information differs between the management and the investors, problems may arise and create conflicts (Healy & Palepu, 2001). To avoid or reduce the information asymmetry, more extensive disclosures are necessary (Mazzi, André, Dionysiou & Tsalavoutas, 2014). Furthermore, financial reports have to be prepared without bias to work effectively (Glaum et al., 2013).

Corporate disclosures may take various forms. The revealed information may either be of narrative- or financial nature. In addition, the disclosures may be provided on an optional basis while some information is required by regulations. Other disclosures are available through Internet sources while some companies choose to have the information in printed form (Alberti-Alhtaybat, Hutaibat & Al-Htaybat, 2012). Reporting is essential for the capital market to function properly and the information is usually found



in the financial reports, including footnotes and financial statements (Haley and Palepu, 2001).

The theories of disclosure suggests that managers are more likely to disclose information that contains good news and avoids to reveal information that contains bad news (Shalev, 2009). Managers may further have an interest in shaping the disclosures to align them with their own interest (Cooper & Keim, 1983). This is why Cooper & Keim (1983) stresses the necessity of regulated corporate disclosure.

Both voluntary and mandatory disclosures may take a cost-benefit approach. Some potential benefits of revealing information could be to attract investors and to allow for benchmarking. However, public information also implies costs for the entities in terms of preparation and disclosure of valuable information (Gélinas, 2007). When this cost decreases, it indicates that the company has learned to perform the activity at a lower cost (Jaber, 2011). Disclosure theories propose that information is more likely to be revealed when the benefits are expected to exceed the costs (Urquiza, Navarro & Trombetta, 2010).

Provisions on disclosure are helpful in managing the imperfections in the information market and serves as an effective tool when it comes to ensuring the production and the spread of accurate information. Without any regulations on disclosure, it is likely that the actual disclosure level falls below the necessary information level. The regulation on financial reporting further raises the credibility of the financial statements (Cooper & Keim, 1983). This explains why all countries have substantial regulations on corporate reporting (Healy & Palepu, 2001). The need for mandatory disclosure requirements applies in particular to the case of goodwill, since the impairment tests are heavily based upon the assumptions made by the management, hence, allows for manipulation (Lhaopadchan, 2010).

To reach the optimal disclosure level, accountants and auditors are expected to work in accordance with the existing principles, such as the principle of independency, as well as the fundamental rules of accounting and reporting (Alberti-Alhtaybat et al., 2012).

3 Methodology

There are two types of research strategies that writers on methodological issues generally differentiate between, namely qualitative and quantitative. The choice of strategy depends on the nature of the research question that the investigator tries to answer and under certain circumstances a combination of both is preferred (Bryman, 2012).

3.1 Research Strategy

Studies with a quantitative research strategy tend to stress the quantification in the data collection and analysis. This is different from the qualitative research strategy, where a greater focus is put on the interpretation of the words in both the analysis and collection of data, to grasp the whole picture. The quantitative strategy usually has a deductive nature, which implies that an established theory is used in the formulation of the hypothesis and which impacts the data collection. Depending on the outcome of the research, the hypothesis is either confirmed or rejected. In contrast, the qualitative strategy generally takes an inductive nature, which implies that a theory is formulated based upon the findings (Bryman, 2012).

This study has a quantitative research strategy with a deductive nature. The report aims at investigating companies' compliance with the disclosure requirements in IAS 36, paragraph 134, where companies' annual reports serves as the main information source for the collection of data. In addition, an examination of different variables that might affect the disclosure level will be carried out. Due to the nature of these research questions, the emphasis is put on the quantification rather than interpreting the words in the annual reports. The examination of the financial reports only intends to answer whether companies comply with the specific requirements or not and therefore, the study does not seek to gather nor analyzing information beyond this level. A deeper understanding of the revealed information is not of interest, the focus is instead to assess if the goodwill impairment notes contains the required information. Moreover, the report is considered to have a deductive nature as theory is connected to the findings.

3.2 Research Method

3.2.1 Sample Selection

The research is interested in observing whether large-, mid- and small cap companies in Sweden disclose the required information regarding goodwill impairment. Therefore, the sample was derived from NASDAQ OMX Stockholm's three different lists. Companies were gathered from the database Retriever Business, where all companies in Sweden are ranked in terms of turnover. The investigation period covers the years 2005-2013, since the annual reports for the year 2014 were not available for all companies in the beginning of the investigation. Thus, one of the requirements was to have a recognized goodwill item in the balance sheet during this period. An examination of companies' annual reports were performed in order to identify whether the entities had recognized a goodwill item or not and in cases where no goodwill item was found, the entities were excluded. Additionally, the financial reports were expected to be prepared in accordance with the framework of IFRS to be considered as relevant. A further criterion was to have annual reports available for the public, when the reports were missing, companies were omitted from the study. Those that were not listed during the entire investigation period were not taken into account, this also applies to firms with broken fiscal years since that would imply partial compliance with IAS 36 in year 2005.

When companies were considered as inappropriate the next largest firm replaced them. This selection process proceeded until a complete sample was obtained, including the ten largest entities within each list, with consideration to the requirements stated above. The final sample for the entire investigation period is presented below in table 3.1.

Table 3.1 – *Sample of the Study*

N	Company	List
1	AB Volvo	Large Cap
2	TelefonAB L M Ericsson	Large Cap
3	Skanska AB	Large Cap
4	AB Electrolux	Large Cap
5	TeliaSonera AB	Large Cap
6	Svenska Cellulosa AB	Large Cap
7	Sandvik AB	Large Cap
8	ICA Gruppen AB	Large Cap
9	Atlas Copco AB	Large Cap
10	Securitas AB	Large Cap
11	Bilia AB	Mid Cap
12	SWECO AB	Mid Cap
13	ÅF AB	Mid Cap
14	Lindab International AB	Mid Cap
15	Beijer Ref AB	Mid Cap
15	Mekonomen AB	Mid Cap
17	Gunnebo AB	Mid Cap
18	Nolato AB	Mid Cap
19	Qliro Group AB	Mid Cap
20	Proffice AB	Mid Cap
21	Bulten AB	Small Cap
22	Bong AB	Small Cap
23	Semcon AB	Small Cap
24	Midway Holding AB	Small Cap
25	Proact IT Group AB	Small Cap
26	PartnerTech AB	Small Cap
27	Elanders AB	Small Cap
28	Knowit AB	Small Cap
29	Rejlers AB	Small Cap
30	Addnode Group AB	Small Cap

3.2.2 Collection of Data for the Main Research Question

The data for the main research question, regarding the compliance with the standard, was solely gathered from the firms' annual reports. The database Retriever Business served as the primary information source since it possesses an extensive access to companies' financial reports and other company information. In cases where the financial reports were missing in the database, the reports were gathered directly from compa-

nies' websites. When reviewing the financial reports, the emphasize were put on the notes of goodwill impairment and if the entities referred to other important notes related to goodwill impairment, these notes were reviewed and considered as well. In order to ensure that proper information was gathered and that a consistent examination of the notes was performed, a disclosure checklist was used during the entire data collection process. The disclosure checklist is described in detail in section 3.2.4. The data gathered for the main research question was processed and entered into a scoreboard, which is explained in the following section.

3.2.2.1 Scoreboard

Scoreboards were constructed to assess the compliance level for each of the firms. Each scoreboard consists of two axes and is a table that illustrates companies' scores for each disclosure criteria. The data that was derived from companies' annual reports was entered into these scoreboards, using the computer software Excel. The tables provided an overview of companies' disclosures and enabled for an evaluation of the compliance level. Separate scoreboards for each year were constructed, with the company names on the vertical axis and the disclosure requirements on the horizontal axis. IASB's latest list of disclosure requirements, in 2015, regarding goodwill impairment, was interpreted and served as a disclosure checklist for this study. The disclosure checklist consisted of 7-12 requirements, including two recently added criteria. Since year 2013, IFRS made it mandatory to inform about the fair value hierarchy as well as the alternative methods used in the valuation.

The number of criteria, that the companies were expected to follow, varied within the sample, mainly due to two aspects. The first aspect concerns which basis that has been used in the calculation of the recoverable amount. Another decisive factor in determining the number of criteria were whether firms have recognized an impairment loss during that specific year or not.

Companies were assigned with one point when they succeed in presenting a mandatory disclosure requirement of IAS 36. However, when the entities failed to meet a certain disclosure criteria, they were assigned with zero points. The number of applicable requirements varied within the sample and it was therefore necessary to indicate the criteria that were not applicable. The non-applicable requirements were denoted with NA in

the scoreboard. Moreover, partial compliance with the requirements was common for some companies, however, a score of one or zero was not considered to be representative. It was more fair to indicate this scenario with the sign *, which demonstrates the partial compliance. The sign * were not taken into account when adding up the total scores. The purpose with the sign * were to visually demonstrate and convey the partial compliance to the readers. The scores obtained by each of the companies were added up and presented in a separate column on the horizontal axis of the scoreboard. The scores were converted into a percentage to be able to make a fair comparison of the companies. If the precise numbers had been used, it would be difficult and unfair to compare them with each other, when different number of disclosure criteria has been applicable. The scoreboards were divided into three categories, representing each list on the Swedish stock market. All the scoreboards can be found in Appendix 1-9.

3.2.2.2 Charts

The study is interested in observing the disclosure behavior over a nine-year period, which makes the use of charts appropriate, since it allows for a trend to be observed. The results obtained from the scoreboards were inserted into a chart to present the compliance level over time, which corresponds to the study's main research question. The data that was entered into the charts represents the average disclosures levels for each year. However, if the variance in the numbers is significant, average numbers may be misleading since it does not show the spread. Therefore, tables with descriptive statistics were presented together with the charts, when necessary.

The use of charts also applied to the sub-questions of the study, which seeks to answer the impact of specific characteristics. Previously collected data has been used in the charts to the extent it was possible, however, additional company information was gathered from Retriever Business when necessary. In the charts that correspond to the sub-questions, average data was used to be able to see a trend over the investigation period. On the vertical axis of the diagrams, the compliance level was presented and on the horizontal axis, the year was stated. As a supplement to the charts, tables with descriptive statistics, presenting the mean-, median- and standard deviation numbers, were provided to avoid a distorted picture.

3.2.3 Collection of Data for the Sub-questions

The first sub-question, which examines whether the size (list) has an impact on companies' disclosure levels, was answered with the findings from the main research question. In this context, size refers to which list the company belongs. The findings from the main research question reflect the disclosure behavior of large-, mid- and small cap companies, which makes the results useful when examining the impact of the size (list) variable on the disclosure level.

The second sub-question examines the impact of three additional variables, namely the age, the audit firm and the industry. This type of variables required additional information to be gathered, since the findings from the main research question were not sufficient enough to answer the question itself. Information about companies' ages, industries and audit firms was collected from Retriever Business.

3.2.3.1 Multiple Regression Analysis

To enhance the reliability of the charts, a regression analysis was necessary to conduct. Regression analyzes are useful tools for testing the relationship between certain variables. The analysis was performed as a complement to the charts and served as a statistical confirmation for the outcomes. The test was essential to be able to confirm whether the variables were associated with the compliance level or not, since the diagrams runs the risk of being misinterpreted. The same data has been used for both the diagrams and the statistical test, which were gathered from companies' annual reports. The regression analysis was carried out in the computer software SPSS and the data that were gathered for the diagrams were transferred to this program, to be able to test the relationship between the compliance level and the specific company characteristics. The model comprised of one dependent variable, namely the compliance level, and four independent variables, which are the size, the age, the audit firm and the industry. Bryman (2012) defines the dependent variable as a factor that is causally impacted by other factors and the independent variables as the factors that have a causal influence on other factors. By putting the dependent and the independent variables in relation to each other, a relationship might be observed.

The majority of the variables of this study were not in numerical values and it was therefore necessary to include several dummy variables to be able to perform this type of test. Non-numeric variables were indicated as dummy variables and this was the case for the size, the audit firms and the industry. Dummy variables are used when the test contains a factor that has two or more categories (John, Whitaker & Johnson, 2006). By treating size, audit firm and industry as dummy variables a relationship could possibly be observed, even though these factors contained different categories. Generally, dummy variables are assigned with a numerical value of either 0 or 1 (John et al., 2006). The number of categories determined the number of dummy variables, since the number of dummy variables always needs to be one less. In cases where more than two categories were used, only one of them was assigned by 1 while the remaining ones were indicated by 0.

The statistical test is not intended to answer the sub-questions itself, but rather to confirm the outcome of the charts. Therefore, the significance level has not been determined at one level. Normally, a significant level of 0, 01, 0, 05 or 0, 10 is applied (Benson, Levine & Krehbiel, 2012). However, in this study, the outcomes are compared at two different levels to see at what level the variables becomes significant and whether the findings of the test are consistent with the outcome of the charts. Variables with a p-value lower than of 0, 05 and 0, 10 have been considered. The p-value indicates how much the certain variable contributes to the model (John et al., 2006). The final model were constructed as follow:

$$Y = \beta_0 + \beta_1 \text{ Age} + D_1 \text{ Large Cap} + D_2 \text{ Small Cap} + D_3 \text{ EY} + D_4 \text{ PwC} + D_5 \text{ Deloitte} + D_6 \text{ Manufacturing}$$

For the size variable, mid cap companies served as the reference for the two other categories and for the audit firm variable, KPMG was the reference firm. In the case of the industry, non-manufacturing companies functioned as the basis for the comparison.

3.2.4 An Interpretation of IAS 36, paragraph 134

The assessment of companies' disclosure levels was conducted by an interpretation of the requirements in IAS 36, paragraph 134. The interpretation of the requirements was converted into a disclosure checklist, which reflects how the examination of the good-

will impairment notes has been carried out. The disclosure checklist is presented in this section and in need of an increased understanding it is highly recommended to review the chapter *Frame of References, section 2.2.2*.

The following must be disclosed when a significant value of the carrying amount of goodwill has been allocated to a CGU (FAR Akademi, 2013):

A) The carrying amount of the goodwill that has been allocated to a CGU must be clearly stated. In cases where goodwill has been distributed to only one CGU, without providing any explanation of the appropriateness of this, companies received zero points. This was also the case when goodwill was not distributed to a CGU.

B) Excluded - Does not specifically address goodwill.

C) A presentation of the basis used when estimating the recoverable amount of the CGU was required. More specifically, whether the value in use or fair value less cost to sell has been applied. If the basis were not clearly stated during a certain year, no points were given and companies were assessed with the least number of requirements to make a fair judgment.

D & E) The following criteria concerns both companies that uses value in use and fair value less cost to sell in the estimation of the recoverable amount. When differences between these two methods exist, this is indicated next to the criteria.

1. Entities must state the key assumptions that have been used as the basis for the cash flow projections. Key assumptions refer to those that the CGU's recoverable amount is sensitive to. The application of wordings such as "other key assumptions or some of the important key assumptions" were indicated by the sign *, which stands for partial compliance. Further, when no assumptions were mentioned, this resulted in zero points.
2. A description of how the values assigned to each key assumption has been determined as well as whether the values are consistent with prior events or external information sources is required. If the values are not consistent with any of these two, a motivation of why and how must be presented. When no description of the approach was provided, no points were allocated.

- a) Companies that uses fair value less cost to sell as a basis for the CGU's recoverable amount must present to which level the calculated value of the CGU belongs to in the fair value hierarchy. This criterion only relates to the year 2013. When entities did not mention the level to which the value of the CGU belongs to, no points were given.
 - b) If the valuation technique has changed, companies must justify the difference in value as well as the reason for the change. This criteria does only concern those that uses fair value less cost to sell in the year 2013. When no information was provided regarding the valuation technique, this resulted in zero points. This were also applied when no explanation for the change were stated.
3. Information about the duration of the cash flow projection must be presented. In cases of intervals, the sign * were given, illustrating partial compliance. Periods of intervals does not tell the precise period used for a certain CGU, which explains the *. When no period was mentioned, no points were assigned. Companies that use the value in use method must further justify why a period longer than five years is appropriate, if this was the case. If a longer period were applied without any justification, zero points were obtained.
 4. The growth rate applied in the cash flow projections beyond the latest forecasts must be indicated in the note. If the growth rate is greater than the average long-term growth rate for that CGU's industry or market, this must be explained. However, this only applies to the entities that use value in use. Growth rates stated in intervals were not considered to be fully complying and were denoted with the sign *. Notes without growth rates resulted in zero points.
 5. Companies must inform about the discount rate that has been used in the cash flow projections. If the discount rate were not indicated for each CGU, neither one nor zero points were assigned, since this was considered as partial compliance, hence, indicated by *. No disclosures of the discount rates equaled zero

points.

F) Regardless of which method the entities have used in their calculation of recoverable amount, a sensitivity analysis is required to be carried out, to see if there is a reasonable possibility of the key assumption to change and result in an impairment loss. If an impairment loss were recognized, the following disclosures were required:

1. How much the recoverable amount deviate from the carrying amount. When no difference was indicated, companies were assigned with zero points.
2. A presentation of the values of the key assumptions that could possibly change. If companies failed to inform about the current values of the key assumptions, no points were given.
3. Entities are required to state how much the key assumptions must change in order for the carrying amount to equal the recoverable amount. If the necessary change was not mentioned, zero points were allocated.

3.3 Quality of Method

Once the data has been collected it is essential to assess the degree of faithfulness of the data. The assessment involves to question the reliability and validity of the technique used (Burns, 2000). It is further necessary to evaluate the quality of the measures (Graziano & Raulin, 2010).

3.3.1 Reliability

The word reliability is often associated with the adjectives dependable, accurate, honest, trustworthy, consistency. At its most basic level, reliability is about ensuring that precise measurement tools are used in the research. The concept of reliability implies that under similar conditions, similar outcomes should be achieved, regardless of the frequency of repeated executions of the measures (Wrench, Thomas-Maddox, Peck Richmond, McCroskey, 2013). The degree of reliability is decided by two components,

namely how the measurement has been carried out as well as how precise the data has been processed (Holme & Solvang, 1997). By minimizing the errors in the measurements a greater reliability is obtained (Burns, 2000).

This study examines companies' annual reports, which includes an interpretation of the goodwill impairment notes. Reviewing the notes involved subjectivity, which was an inherent element in the process. In order to minimize the subjectivity in the process, a disclosure checklist was developed to serve as an interpretation tool for the data collection. This increased the transparency and consistency of the data gathered.

3.3.2 Validity

An even more essential concept to consider, in addition to the reliability, is the validity of the study (Holme & Solvang, 1997). The concept of validity refers to whether the test of the research is measuring what it intends to measure. The measurement tools may be reliable, providing consistent outcomes from time to time, however, they are not considered to be valid if they fail to measure what the research intends to measure. The term validity may be divided into two different groups, namely internal validity and external validity (Burns, 2000). The former group refers to studies where causality can be found in the observations. The latter group, on the other hand, is about being able to generalize the outcome of the study to other persons, times and settings (Roe & Just, 2009).

This research examines whether a relationship between companies' disclosure levels and some specific characteristics of the firms exists. The study measures the variables that are most prevalent in previous studies, which explain companies' compliance levels. However, additional factors may impact the disclosure behavior.

3.3.3 Critique of References

Companies' annual reports served as the primary information source for this research, these reports are prepared by the companies themselves. Due to the fact that the companies are involved in the preparation, the reports cannot be considered as objective. Annual reports are however monitored by different parties such as auditors, governmental

bodies, tax agencies and shareholders, which makes it important for the companies to prepare the reports properly. In general, annual reports are considered as reliable.

Moreover, the study has been based upon academically articles, which have been peer reviewed and are therefore seen as trustworthy. Other information sources are documents published by well-known organizations, such as Föreningen Auktoriserade Revisorer (FAR) and IASB, and these papers are highly reliable and serve as the law for listed companies.

3.3.4 Critique of Method

The study's sample is derived from each of the three lists on *NASDAQ OMX Stockholm*, namely large cap, medium cap and small cap. However, not all companies have been considered within each of the lists, only the ten largest entities are covered in the sample. Since this study strives to represent Swedish listed companies, it is essential to not exclude any of the three lists. A sample of thirty companies may be seen as limited to be able to state the disclosure behavior of listed companies in Sweden. However, the study examines the disclosures over a nine-year period, which allows for a trend to be observed.

To assess the compliance level for each company, an interpretation of IAS 36, paragraph 134 was conducted, which involves subjectivity. The interpretation was made carefully and with consistent judgments under the entire investigation. Hence, companies were assessed under the same conditions.

The first- and the second sub-questions were answered through diagrams. The data that were put into the charts were gathered from the scoreboards. This data has been collected with consistent judgments. To be able to use the diagrams in answering the research questions it was necessary to interpret the outcome of the charts, which might involve misinterpretations. To reduce this risk, a multiple regression analysis was carried out to confirm the outcome of the graphs. Hence, the method becomes more reliable. The statistical test was performed on a limited sample, however, a great number of observations were used and the test is therefore considered to be sufficient.

4 Empirical Findings

4.1 The Findings of the Swedish Companies' Compliance Levels

This section presents the findings from the observation of the disclosure behavior among listed companies in Sweden. A presentation of the compliance level is provided and refers to the study's main research question. The section further outlines the disclosure criteria that seemed to be more difficult to comply with, in comparison to the other requirements. Thereafter, a presentation of certain company characteristics that might influence the level of disclosure will be given. Both the outcome of the diagrams and the statistical testing will be shown, hence, increasing the reliability. An observation of a total amount of thirty companies was carried out.

Table 4.1 – *Descriptive Statistics*

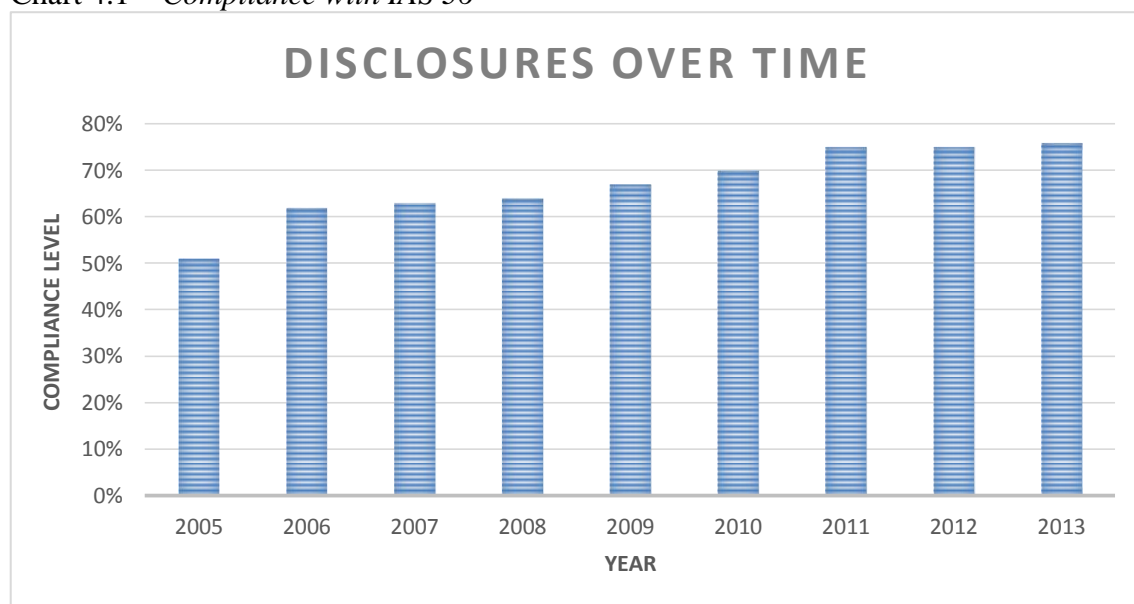
Year	Mean	Median	St. deviation
2005	0,513	0,535	0,239
2006	0,617	0,570	0,165
2007	0,625	0,570	0,165
2008	0,642	0,570	0,179
2009	0,665	0,705	0,171
2010	0,696	0,710	0,153
2011	0,747	0,710	0,165
2012	0,746	0,710	0,157
2013	0,755	0,710	0,159

The compliance level with IAS 36, over the nine-year period, is found in table 4.1. Overall, the disclosure level indicates an increasing trend, changing from 51 % to 76 %. Thus, an improvement of 24 % is seen from year 2005 to year 2013. The mean column represents the average disclosure levels of the three groups together over a time period of nine years. The most radical increase occurred between year 2005 and 2006, where the compliance level went from 51, 3 % to 61, 7 %. Since year 2006, the improvements seem to be more modest over the years. The greatest variance in compliance is found in 2005, 2008 and 2009, with a standard deviation of 24%, 18% and 17% respectively. The median column represents the values in between the lowest and the highest values

of compliance and it is evident from the table that the most stable median values are found during 2006-2008 and 2010-2013.

The compliance level of Swedish listed companies in 2013 equals an average number of 76%. This is illustrated in chart 4.1, where the disclosure trend over the nine years is seen.

Chart 4.1 – *Compliance with IAS 36*



The total number of requirements in the standard varied from 7-12. Some of the requirements contained a higher compliance level than others and zero compliance were experienced only once by one company in year 2005. However, seven companies in total obtained full compliance with the standard during the entire investigation period. Full compliance were most common in year 2011, where six companies provided all necessary information regarding the goodwill impairment test (see Appendix 3). Table 4.2 shows the average degree of compliance for each criterion over the investigation period.

Table 4.2 – Compliance by Criteria

<i>Fundamental Criteria</i>	<i>Mean Large Cap</i>	<i>Mean Mid Cap</i>	<i>Mean Small Cap</i>	<i>Applicable to</i>	<i>Total</i>
Carrying amount of allocated GW	0,96	0,96	0,69	30	0,87
Basis Used (VIU or FV)	0,92	0,90	0,98	30	0,93
<i>Value in Use</i>					
Key assumptions of cash flow projections	0,87	0,50	0,32	29	0,56
Description of the key assumption values	0,42	0,33	0,30	29	0,35
Duration of the cash flow projections	0,88	0,72	0,66	29	0,75
Growth rate	0,49	0,64	0,70	29	0,61
Discount rate	0,73	0,87	0,96	29	0,85
<i>Fair value less cost to sell</i>					
Key assumptions of cash flow projections	0,00	x	x	1	0,00
Description of the key assumption values	0,00	x	x	1	0,00
FV Hierarchy	0,00	x	x	1	0,00
Alternative valuation method used	0,00	x	x	1	0,00
Duration of the cash flow projections	0,33	x	x	1	0,33
Growth rate	0,00	x	x	1	0,00
Discount rate	1,00	x	x	1	1,00
<i>Sensitivity Analysis</i>					
Deviating amount	0,77	0,28	0,30	5 - 11	0,45
Value of the key assumptions	0,22	0,33	0,28	5 - 11	0,28
Change in value	0,28	0,62	0,43	5 - 11	0,44

The table indicates a compliance level of 87 % and 93 % respectively for the fundamental requirements, which were applicable for all companies within the sample. The majority of the firms used the value in use as method during the entire period, only one firm used the opposite method when estimating the recoverable amount. Hence, the average numbers in the table are based upon different numbers of companies, which explains why zero compliance is obtained in certain criteria for the fair value method. The criteria that indicated the highest compliance levels were the fundamental requirements as well as the disclosure of the discount rate, which varied from 85 % - 100 %. The more specific criteria related to the estimation of the recoverable amount, except for the discount rate, demonstrate a lower compliance level, ranging from 33% - 75%. During the investigation period, 5-11 companies recognized an impairment loss in their annual

report. However none of the disclosure levels, related to the sensitivity analysis, exceeded a level of 45 %, which is shown in table 4.2.

4.2 The Impact of Company Characteristics on the Compliance

In an attempt to explain the variance in compliance level among Swedish listed companies, some specific variables have been examined and put in relation to the firm's disclosure levels. The findings for each of the variables are presented below.

4.2.1 Size

The findings related to size variable suggest that mid cap companies disclose slightly better than those companies listed on the large cap list during 2009 - 2013, except for year 2012. Before 2009, large cap companies kept the highest disclosure level among all lists. The disclosure trend of small cap companies was found to be below the compliance level of both large cap- and mid cap companies. Chart 4.2 illustrates the average level of information revealed by each of the three groups and descriptive statistics related to the chart are provided in the tables 4.3 - 4.5. The standard deviation ranges from 12% - 30 % for mid cap, companies compared to 12% - 20 % for large cap companies and 12% - 25 % for small cap companies. The standard deviation explains the spread of numbers within each group, in terms of the compliance level.

Chart 4.2 – *Disclosure Levels of the Three Lists*

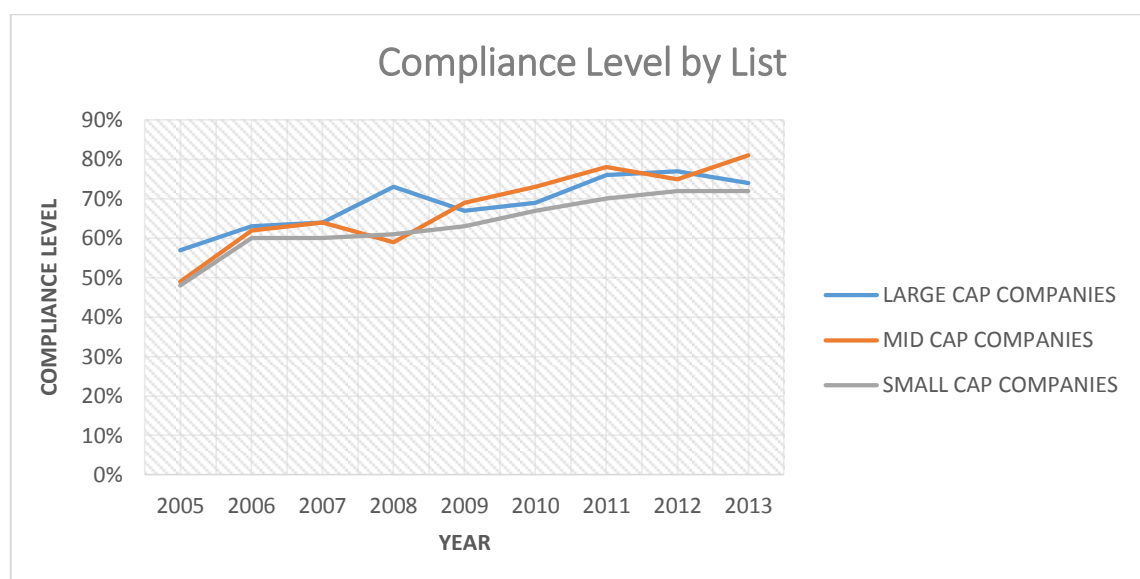


Table 4.3 – *Descriptive Statistics: Large Cap*

LARGE CAP	2005	2006	2007	2008	2009	2010	2011	2012	2013
MEAN	0,573	0,632	0,642	0,728	0,671	0,689	0,757	0,768	0,742
MEDIAN	0,585	0,635	0,570	0,710	0,710	0,700	0,710	0,860	0,710
ST. DEVIATION	0,147	0,126	0,118	0,158	0,169	0,151	0,177	0,192	0,195

Table 4.4 – *Descriptive Statistics: Mid Cap*

MID CAP	2005	2006	2007	2008	2009	2010	2011	2012	2013
MEAN	0,491	0,621	0,638	0,592	0,693	0,730	0,784	0,750	0,807
MEDIAN	0,415	0,570	0,570	0,570	0,705	0,710	0,785	0,710	0,860
ST. DEVIATION	0,304	0,220	0,239	0,214	0,191	0,169	0,156	0,133	0,119

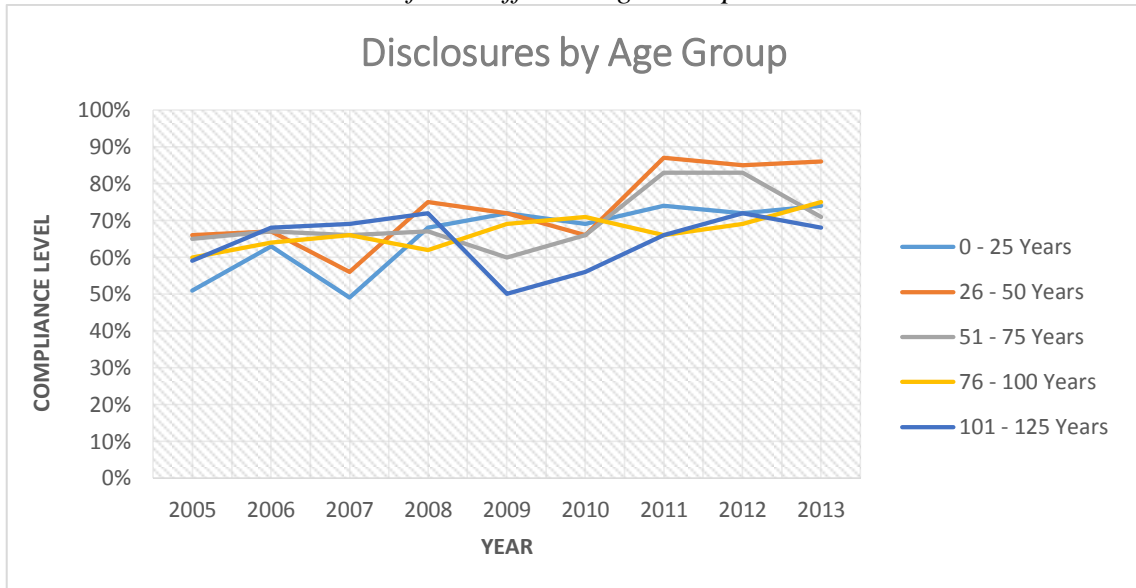
Table 4.5 – *Descriptive Statistics: Small Cap*

SMALL CAP	2005	2006	2007	2008	2009	2010	2011	2012	2013
MEAN	0,475	0,598	0,595	0,607	0,631	0,669	0,701	0,720	0,716
MEDIAN	0,535	0,570	0,570	0,570	0,570	0,710	0,655	0,710	0,705
ST. DEVIATION	0,156	0,153	0,169	0,150	0,163	0,144	0,121	0,153	0,253

4.2.2 Age, Audit Firm and Industry

Companies that have been active on the market for 26 - 50 years have the highest level of compliance, alternately, during the entire investigation period. The most stable compliance level relates to the age group 70 - 100 years and lies in between all other groups. Firms with an age of 101-125 were the least informing group since year 2008. This was not the case during 2006 and 2007, were this group had the highest compliance. An overview of all age groups disclosure levels is provided in chart 4.3. However, it is necessary to consider the fact that some of the age groups are based upon a limited number of companies, which could impact the outcome presented in the chart.

Chart 4.3 – Disclosure Levels of the Different Age Groups



The findings of the audit firm variable are presented in chart 4.4, where average numbers have been used. Entities that are audited by KPMG complied with the standard with more than 70 % since 2010, which is slightly better than those companies audited by Deloitte. The disclosure trend of companies audited by EY shows a deviating pattern during the entire investigation period, illustrated in chart 4.4, where these firms turned out to be the least complying group. Overall, an increasing trend among all companies is observed. However, it is necessary to take in to account the variance in table 4.6 - 4.9, due to the fact that PwC have audited more than half of the sample.

Chart 4.4 – Disclosure Level by Audit Firm

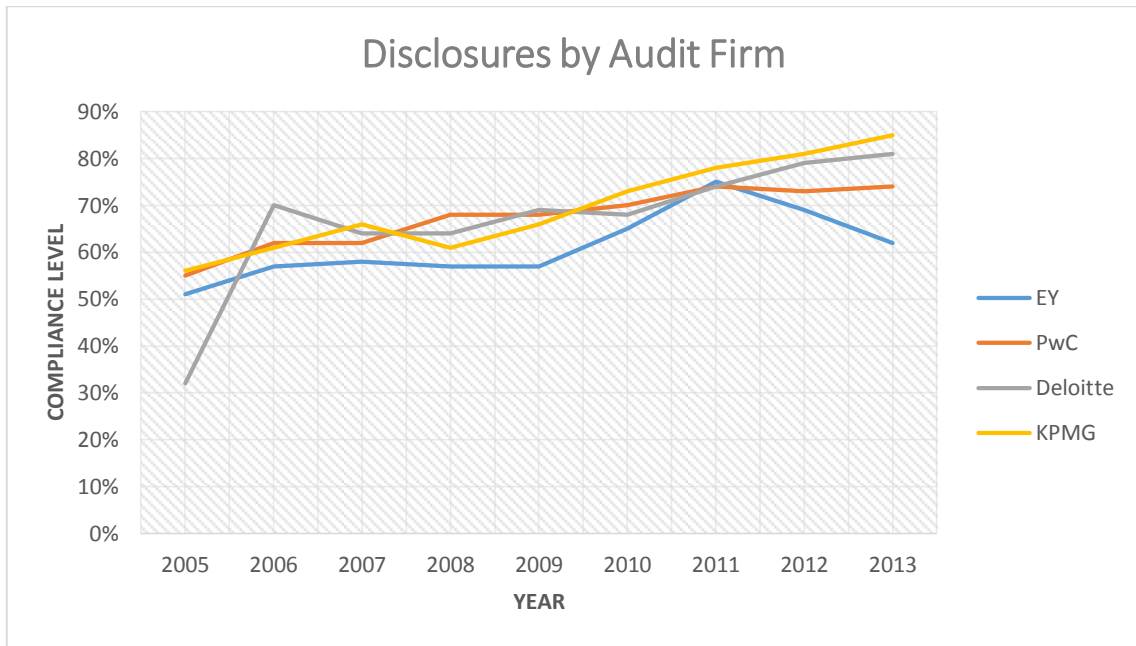


Table 4.6 – Descriptive Statistics: PwC

PwC	2005	2006	2007	2008	2009	2010	2011	2012	2013
ST. DEVIATION	0,178	0,155	0,121	0,154	0,166	0,182	0,190	0,163	0,173

Table 4.7 – Descriptive Statistics: EY

EY	2005	2006	2007	2008	2009	2010	2011	2012	2013
ST. DEVIATION	0,281	0,099	0,201	0,232	0,114	0,070	0,139	0,131	0,061

Table 4.8 – Descriptive Statistics: Deloitte

DELOITTE	2005	2006	2007	2008	2009	2010	2011	2012	2013
ST. DEVIATION	0,315	0,095	0,193	0,196	0,147	0,120	0,187	0,185	0,169

Table 4.9 – Descriptive Statistics: KPMG

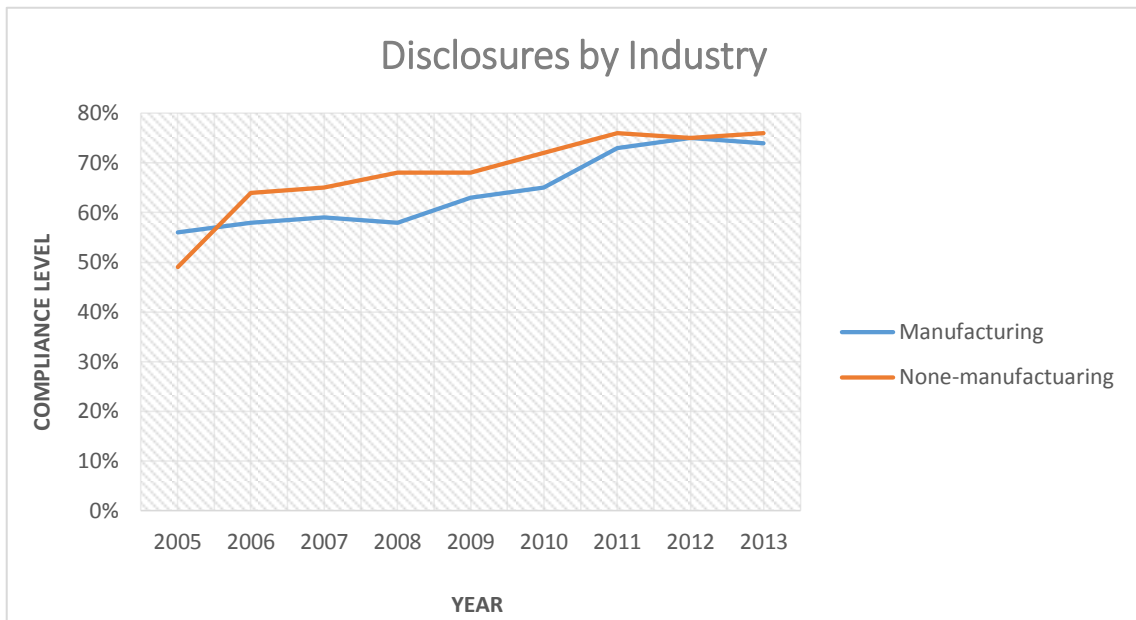
KPMG	2005	2006	2007	2008	2009	2010	2011	2012	2013
ST. DEVIATION	0,288	0,271	0,241	0,214	0,227	0,161	0,125	0,149	0,097

The difference in compliance level between manufacturing companies and non-manufacturing firms were marginal during 2011-2013, which is shown in chart 4.5. The level of disclosure for both industries was constantly within a range of 70 % - 80 % dur-



ing these years. However, in the period before 2011 a more fluctuating disclosure level between the two industries were observable.

Chart 4.5 – *Disclosure by Industry*



4.3 Statistical Confirmation

To enhance the reliability of the outcomes presented in section 4.2, a multiple regression analysis was carried out. The outcome of the model is presented in table 4.12. The model clarifies which variables that were significant in explaining the compliance level, both at a 0, 10 level and at a 0, 05 level. The following predictors had a p-value lower than 0, 10: Small cap companies, age, industry and EY (one of the audit firms) and is therefore considered to be significant at 0, 10. When considering a level of 0, 05, only EY were positively associated with the compliance level.

Table 4.10 indicates an adjusted R square value of 0.176. The adjusted R square informs to which degree the model explains the variance in the dependent variable, which in this context refers to the compliance level. This implies that the independent variables, size, age, audit firm and industry, explains the variance in compliance with approximately 18 %. Further, table 4.11 states that the model have a p-value lower than 0, 01, which means that the model is significant and considered to be useful.

Table 4.10 – *The Model's Usefulness*

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,447 ^a	,200	,176	17,03754

a. Predictors: (Constant), Deloitte, Year, Manufacturing, EY, Smallcap, Age, Largecap, PwC

Table 4.11 – *Significance of the Model*

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18961,322	8	2370,165	8,165	,000 ^b
	Residual	75762,530	261	290,278		
	Total	94723,852	269			

a. Dependent Variable: Compliancelevel

b. Predictors: (Constant), Deloitte, Year, Manufacturing, EY, Smallcap, Age, Largecap, PwC

Table 4.12 – *Model Coefficients*

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	60,598	3,920		15,460	,000
	Largecap	5,432	3,322	,137	1,635	,103
	Smallcap	-4,796	2,836	-,121	-1,691	,092
	Age	-,082	,044	-,155	-1,869	,063
	Manufacturing	-3,986	2,372	-,103	-1,681	,094
	Year	2,781	,404	,383	6,876	,000
	EY	-8,912	3,827	-,171	-2,329	,021
	PwC	-1,494	3,172	-,040	-,471	,638
	Deloitte	-1,835	3,942	-,034	-,465	,642

a. Dependent Variable: Compliancelevel

5 Analysis

5.1 Compliance with the Standard

5.1.1 The Disclosure Trend over Time

The result from the main research question shows a high non-compliance level with IAS 36, paragraph 134, among Swedish listed companies. The lowest disclosure level was shown in year 2005, where the compliance level was only 51, 3%. The low compliance level could be explained by the implementation of IFRS in the year 2005, implying that the standard was completely new for all listed companies and that none of the firms had experiences from the standard at this point. Moreover, companies may have experienced uncertainties with the standard and it was therefore more convenient to first observe how the other companies coped with the standard. Hjelström & Schuster (2011) reported a high non-compliance among Swedish companies in 2005, which confirms the findings of this study. It is evident from the empirical section that the compliance level shows an increasing trend during the period 2005-2013. Hartwig (2013) reached the same result, where an improvement in the disclosure level were found during 2005-2008. However, the compliance level in year 2013 is still not satisfying since it shows an average of 76 %.

The largest increase in compliance was found between the years 2005-2006 (see chart 4.1). A possible explanation to this could be that companies, at this point in time, were given the opportunity to improve their disclosures from the implementation year, where the reporting entities had no earlier experiences from the standard. Companies' annual reports are official documents and entities may take part of the information in the reports and learn from each other. However, this was not the case for year 2005, since no previous publication had been made under the IFRS regulation. Comparability is one of the enhancing qualitative characteristics in IASB's conceptual framework. The concept requires the information to be comparable, which makes it more likely for companies to identify similarities and differences in their notes. This could lead to that the companies learn from each other and improve their disclosures, which would explain the increasing trend. The increase in compliance during 2005-2006 was further predicted by Persson & Hultén (2006), which expected the disclosures of goodwill impairment test to be more

complete in year 2006. The authors argue that companies should have been taken care of some of the standard's interpretation difficulties at this point in time.

The findings showed a more stable increase in the compliance level during 2007-2013, before this period, the improvement rate was greater. Jaber (2011) argues that the level of improvement changes with the level of experience, thus, improvements are more likely to occur when more experience is gained. This explains why this study observed an increasing pattern. The author further states that enhancement is an indication of learning, which causes companies' costs to decrease. This phenomenon is known as the "learning curve". This implies that the companies' learning curves in this study are steeper for the years 2005-2006, compared to the remaining years, suggesting that the level of learning becomes steadier with the years. When looking at the learning curve from a cost-benefit perspective, the cost of revealing information should decrease as the experience of the standard increases. The fact that experience leads to improvements is further supported by Persson & Hultén (2006).

5.1.2 Compliance Level by Disclosure Requirement

The most complying criteria were found to be the fundamental requirements. Petersen & Plenborg (2010) reached the same outcome, which confirms the findings of this study. The first requirement within the fundamental criteria involves disclosure of the goodwill allocation to a CGU and an 87% level of disclosure was observed in this criteria. The number of companies' CGUs ranged from one CGU to several CGUs. IASB's conceptual framework requires the information in the reports to be complete in order for the users to obtain a full understanding of the company. Disclosures of only one CGU may therefore be questioned since certain necessary information might be unrevealed, which could result in difficulties for the users to make informed decisions. Carlin & Finch (2011) sees the activity of aggregation of goodwill as a tool for determining the timing of the impairment loss. They further state that when this type of activity exists, an overstatement of the earnings and the assets becomes more likely to occur. Unfortunately, this influences the transparency of the financial reporting.

The findings of this study showed that five companies frequently allocated goodwill to only one CGU and an overstatement of these companies' assets may therefore not be impossible. Wines et al. (2007) explain the activity of aggregation with the effort of

concealing valuable information. The management may desire to hide a poorly performing CGU with a better performing CGU, to avoid the recognition of an impairment loss. The authors argues that the incentives of aggregating the goodwill could emerge from the fact that the impairment tests are both time consuming and costly and it is therefore preferable to not test every CGU.

It is reasonable to assume that this type of activity is more likely to occur during times of financial crises, since the CGUs probably perform worse during severe financial times and the desire of masking these poor performances becomes greater. This study showed that the largest number of impairment losses was found before 2008, where eleven of thirty companies recognized an impairment loss in the year 2006 (see Appendix 8). During 2008-2011 the number of companies with a recognized impairment loss varied from 5-7, which is around 17%-23% of the sample compared to 37% in 2006 (see Appendix 3-6). The lower number of impairment losses may indicate that companies in this study aggregated some of the CGUs during 2008-2011 in order to avoid the recognition of an impairment loss. Disclosure theory does not support the activity of aggregation since it proposes that sufficient information should be revealed to the public, in order for the market operators to make informed decisions. Adding the goodwill amount of several CGUs may not be considered as sufficient since certain information may be unrevealed.

The difficulty of allocating the goodwill to a CGU is evident for some of the companies in this study, as the information was either narrow or vague. This fact is supported by Hoogendoorn (2010), which argues that the identification of a CGU is one of the most complex areas in practice. McDonnell (2005) further states that the allocation process is related to difficulties, which might describe why five companies distributed the goodwill to only one CGU.

The second fundamental requirement involved informing about the method used in the estimation of the recoverable amount. This criteria had a compliance level of 93%, which was the highest level observed. However, 93% cannot be considered as full compliance and the fact that this number is estimated based upon an average of all lists must be taken into consideration. The most common method was the value in use approach. The reason for this could be that the fair value method involves some kind of complexity that companies tried to avoid. Petersen & Plenborg (2010) explains the limited use of

the fair value method with the necessity of a market value for the CGU to exist. This might explain why only one company in this study used fair value less cost to sell in the estimation of the recoverable amount.

Carlin & Finch (2011) also found in their study that the value in use method was superior and argues that this may be due to the possibility of adjusting the numbers in a preferable way. This argument is consistent with the disclosure theory, which states that the managers have the incentive to manipulate the information so it fits their own interest. However, the possibility of distorting the numbers is limited due to the existence of the standards that requires certain information to be presented. The financial reports are subject to extensive supervision by different regulating bodies, which further limits the possibility of dishonest reporting. Moreover, manipulation of information stands in conflict with two of the qualitative characteristics presented in the conceptual framework of IASB, namely faithful representation and verifiability, which implies that the information in the reports should be presented in a true and fair way and without any bias.

Despite the fact that the fundamental requirements contained two of the highest compliance levels, a high non-compliance was found in some of the specific criteria, irrespectively of the method used. However, both the disclosure of the discount rate and the disclosure of the duration of the cash flow projections showed a different compliance level from the remaining specific criteria. A compliance level of 85 % and 75 %, respectively, were observed in these two criteria. Clinch & Verreccia (1997) argues that the disclosures that could serve the companies as a competitive disadvantage is less likely to be revealed. Therefore, it is possible that these disclosure requirements do not reveal any harmful information since companies seemed to comply with these criteria to a larger extent compared to the other specific criteria.

The least informative specific criteria was related to the key assumptions, description of how the values of the key assumptions have been determined as well as the growth rate used in the estimation of the recoverable amount, ranging from 35 % - 61 %. Camodeca et al. (2013) argues that companies tend to fail in revealing information about the key assumptions, which confirms the findings of this study. Moreover, Hjelström & Schuster (2011) found out that companies were reluctant to reveal information about the key assumptions, since it was considered to be sensitive. This could explain why this criterion was one of the least informative disclosure requirements in this study. ESMA (2013)

further suggests that an improvement of both the disclosures related to the key assumptions and the growth rate is necessary. Izzo et al. (2013) explains the partial compliance in their study with the fact that the disclosure of certain sensitive information may be associated with a higher cost than benefit. Since these three criteria contained the lowest compliance level in this study, the information might be considered as sensitive. According to the disclosure theory, benchmarking is one of the benefits of revealing information. Benchmarking creates an opportunity for companies to compare themselves with each other, which might result in learning and improvements. This might probably serve the leading firms as a competitive disadvantage, since it allows the entities to take part of certain company information.

Glaum et al. (2013) further proposes that credible information allows market operators to assess the decisions taken by the management. Hence, it is possible to argue that the management is not willing to allow the market participants to take part of this type of information. Moreover, Shalev (2009) suggests that the information will be revealed only when it contains good news. This implies that there is a good reason to question whether the information related to these three criteria contains bad news.

It was common for some of the companies to present the growth rate in intervals, rather than specifying the precise growth rate for the specific CGU. Therefore, the question of whether this information is credible may arise, since intervals hampers the assessment of the decisions taken by the management. Growth rates in intervals stands further in conflict with the concept understandability, which states that the information should be presented in a clear and concise manner. Intervals does not specify the precise growth rate used for each CGU, hence, it is not clearly presented.

The criteria related to the sensitivity analysis were never above a level of 45 %, which is not even half of what the standard requires. Both ESMA (2013) and Devalle & Rizzato (2012) identified a high non-compliance for the sensitivity analysis. ESMA (2013) argues that the impairment losses are more likely to occur during times of economic crisis. During the investigation period of this study, only 5-11 companies reported an impairment loss, which is a relatively low number in relation to the total sample size and the expectations of the investigation. Surprisingly, some of the companies did not even report an impairment loss during the entire period. This may be questioned as a nine-year period was applied, including years of financial crisis. Ji (2013) reached a similar

outcome, where the expectations on the impairment losses were higher than the results indicated. Further, her study indicated that the impairment losses tend to be delayed and avoided, this might explain why some companies in this research did not recognize an impairment loss during the entire investigation period.

The avoidance of an impairment loss can further be explained by the disclosure theory, which states that managers tend to act in the companies' best interest. In this case, companies' best interest would be to conceal the impairment loss. Hence, the reliability of the impairment tests may be questioned.

5.2 Reasons for Non-Compliance

Swedish listed companies are not considered to meet the mandatory requirements regarding goodwill impairment. This is supported by previous studies, which also found that poor compliance was related to the entire framework of IFRS. The study of Glaum et al. (2013) and Devalle & Rizzato (2012) showed, among other studies, that the European companies had a low compliance level with IAS 36. Disclosure theories propose that the more information companies disclose the better it is, since this reduces the information gap between the management and the investors. The Swedish companies have not enforced the idea of the theory, as full compliance with the standard is not even obtained after a nine-year experience of the standard. Therefore, the question of why non-compliance exists arises.

One of the explanations for the companies in this study to have a low compliance could be related to the cost-benefit approach in the disclosure theory, which implies that the benefit necessarily needs to exceed the cost of revealing the information. Gélinas (2007) states that the disclosure of information implies a cost for the entities, in terms of preparing the information and revealing it. If the cost is expected to exceed the benefit, companies may choose to not reveal the information, which might explain the outcome of this study. Revealing sensitive information may also be seen as a cost for a company, which may result in that certain information is kept within the company.

The findings showed that companies only complied to a certain extent in the beginning of the investigation period. A possible explanation for this may be provided by Persson & Hultén (2006), which states that practice leads to improvement in the disclosures. In

the first years of the research period companies did not have any, or minor, experience from the standard, which explains the low compliance. However, the poor compliance was not only found during the implementation year, but also in year 2013. This means that the reasoning of Persson & Hultén (2006) and the findings from this study are in conflict with each other. The idea of the experience to improve the compliance level does not hold for this investigation, since a nine-year experience of the standard still shows a non-optimal compliance level.

In the study of Ji (2013), it was clear that the standard involved complexities. A complicated standard may result in that companies ignore to reveal the information that is required, which is an alternative explanation for the outcome in this research. Hoogendorn (2006) further confirms the complexity of the standard and argues that this perception could also be found among auditors and other specialists. It is therefore evident that the standard is associated with interpretation difficulties, which in turn might affect companies' compliance level.

Since IAS 36 is a principle-based standard (Agoglia et al., 2011), an interpretation of the disclosure criteria is possible. The room for interpretation may describe why certain companies complied to a larger extent in comparison to other entities. In IASB's conceptual framework, comparability is mentioned as one of the enhancing qualitative characteristics. The opportunity of interpretation could jeopardize the concept of comparability as it allows the management to have different views of the disclosure criteria and what it should contain. Hence, comparability of companies' disclosures might be impossible if the differences become too significant. The scoreboards clearly showed that some companies succeeded in complying with certain requirements, while other entities failed to provide the specific information. This might be explained with the room for interpretation.

Haley & Palepu (2001) states that reporting is an essential tool for the capital market to work at its fullest potential. It is clear from this study that Swedish listed companies still needs to improve their disclosure levels. Busiman (2006) confirms this by proposing that there is a room for improvement. Hence, the reporting is seen as insufficient and remains an area of concern.

5.3 Company Characteristics that Influences the Compliance Level

5.3.1 Size

The size of the companies usually refers to the turnover or total assets, however, it is essential to bear in mind that the size in this report refers to the list. Thus, the results of this study may not be consistent with previous studies that refer to other concepts. The findings indicates that a certain relationship between the disclosure level and the listing-type exists, since it is clear that the small cap companies have maintained the lowest level of compliance during the entire investigation period (see chart 4.2). Furthermore, the large - and mid cap companies have switched from being the most complying group to the second most complying group. Hence, this supports the existence of the relationship, although it might be minor.

When comparing the trends within the chart with the results of the regression analysis, the findings seems to not be fully consistent with each other. The outcome of the regression analysis did not show an equally strong relationship between the predictor large cap and the compliance level, as for the predictor small cap. The test showed a p-value of 0, 103 for large cap, which lies slightly above the level of 0, 10, proposed by Berenson et al. (2012). This implies that a relationship is noticeable, but not as strong as for the small cap predictor, which had a p-value of 0, 092. Bryman (2012) suggests on the other hand that a level of 0, 01 or 0, 05 should be used in social research. Considering the argument of Bryman (2012), none of the size predictors would be seen as influential on the compliance level.

A possible explanation for the outcome can be found in the disclosure theory, which states that public information is often associated with a cost, resulting in that the information is revealed only if the benefits are expected to exceed the costs. It is reasonable to assume that larger companies possess more resources than smaller companies. Hence, these companies are more likely to afford the costs associated with the disclosure, ending up with a higher compliance level than other entities. The results showed that large cap companies were the most complying list in five out of nine years, while the mid cap companies were the dominant group, in terms of disclosure, in the remaining years (see chart 4.2). The unstable trend for these two lists may be explained by the variance of the



disclosures among the mid cap companies. With a standard deviation ranging from 12% - 30%, the graph is likely to shift substantially over the years. If the variance in the compliance level would have been more narrow for the mid cap list, the graph might had been below the large cap list during the entire period. Hence, indicating a stronger relationship between companies' compliance levels and the size. Another explanation for the different outcomes could be that the chart is not considering other variables than the size, which the statistical test does. This might result in that the indications of the outcomes are different from each other.

Petersen & Plenborg (2010) explains that it is reasonable to expect that larger entities possesses better opportunities of adopting competences in special areas, resulting in that inconsistencies in the execution of the impairment test is less likely for larger companies. This could be one of the reasons for the large cap list to be the most complying group in the majority of the investigation years. Moreover, both Petersen & Plenborg (2010) and Hoogendoorn (2006) reached the conclusion that companies tend to experience difficulties in defining a CGU. In this study, this was especially shown for the small cap companies, which had a compliance level of 69 % with the first fundamental criteria, compared to 96 % for both large- and mid cap companies. This further supports the indication of the size variable to be influential on the compliance level and describes why small cap companies shows a lower level of disclosure, compared to the other lists.

Previous studies that have examined the role of the size have reached conflicting results. Hartwig (2013) found out that the size were one of the factors that explained the compliance level, while Petersen & Plenborg (2010) stated the opposite. Bepari et al. (2014) argues that the size variable is only significant when the industry type is controlled. This study is more consistent with Hartwig (2013) when the significance level is set at 0, 10. At a level of 0, 05, the results of the test becomes more in line with Petersen & Plenborg (2010).

5.3.2 Age, Audit Firm and Industry

5.3.2.1 Age

This study has observed the impact of companies' ages on the compliance level through two different approaches. The empirical section demonstrates that companies' ages does

not influence the compliance level with the standard, since the oldest age group (101-125 years) turned out to be the least complying group in four out of nine years (see chart 4.3). The chart further illustrates that the most complying group, in the majority of the years, is the second youngest age group (26-50 years). The result in the diagram proposes that the compliance level is not automatically increasing with the age. Since the compliance level is different for each age group and the trends shows different patterns, it is possible that the age influences the compliance level, but whether this impact is negative or positive remains unclear. However, in general, the diagram indicates no relationship between the compliance level and companies' ages.

The regression analysis indicated that no relationship exists at a 0,05 level since the variable has a p-value of 0,063, which is in line with the outcome of the chart. This is similar to what Glaum & Street (2003) concluded from their study. The variable becomes, on the other hand, significant at a level of 0,10. The explanation for inconsistent outcomes of the two approaches may be found in the way the data has been processed. The data that was entered into the charts was divided into five different age intervals, while the statistical test was carried out without any categorization.

Persson & Hultén (2006) argues that the experience of the standard is one of the important components for the improvement of the disclosure level. However, in this study, all companies have had the same experience from the standard since it was officially implemented in year 2005 and was applicable for all listed companies in Sweden. The possibility of becoming convenient with the standard is therefore equal for all entities, as none of the observed companies adopted the framework of IFRS later than year 2005. The reasoning of Persson & Hultén (2006) does not hold for this study since a more stable increasing trend would have been observed for all of the age groups. The diagram shows that the compliance level varied significantly over the years for each of the age groups, which means that even though more experiences from the standard is obtained companies does not seem to improve.

Cooper & Keim (1983) further stresses the necessity of regulations on corporate disclosures, since they suggests that it ensures the production and disclosure of information. Although IAS 36 is a regulated standard, full compliance is not obtained by any of the age groups within the study. However, it is important to take into account that some of the age groups' compliance levels are based upon few companies, while other age

groups comprises of more companies. This could explain the inconsistent outcomes of the chart and the statistical testing.

5.3.2.2 Audit Firm

The findings of the audit firm variable shows similar trends for all of the audit firms, except for EY (see chart 4.4). Since the graphs for KPMG, Deloitte and PwC are similar to each other, no relationship between the audit firm and compliance level seems to exist. Wallace et al. (1994) supports this outcome by reaching the same conclusions as the chart indicates. All companies in this study have been audited by the Big Four, hence, similar assessment of the entities' disclosures was expected by the audit firms.

The statistical test showed on the other hand that EY was significant at both levels, while the remaining audit firms were not. The regression analysis illustrates a vague relationship between the audit firm and the compliance level, since the predictor EY is significant at a level of 0,05 and 0,10. Glaum & Street (2003) and Glaum et al. (2013) found out that the audit firm is associated with companies' compliance levels, which is in line with what the statistical test shows for the predictor EY. However, only EY was positively associated with the compliance level since the remaining audit firms shows substantially deviating numbers from a significance level of 0,10.

The contradictory outcomes in this investigation could have been explained by the fact that PwC was the audit firm for the majority of the companies, while the remaining ones only audited 4-6 each. However, this does not seem to be the reason, since Deloitte would have shown the same result as EY in the statistical test, due to the similar amount of companies audited. It is essential to clarify that previous studies have investigated the compliance level of companies that have been audited by both the Big Four and other audit firms, which might explain why this study have reached deviating results. In this investigation, all companies have been audited by the Big Four, resulting in that the audit firm variable in fact only tests the differences in disclosure among the Big Four.

Alberti-Alhtaybat et al. (2012) suggests that if the auditors work in accordance with the existing principles and rules of accounting and reporting, the optimal disclosure level is more likely to be reached. However none of the companies reached a compliance level

above 85 %. Thus, the work of the audit firms might be questioned, since 85 % is not the optimal level of disclosure.

5.3.2.3 Industry

The result indicates that there is a difference in terms of disclosures between the non-manufacturing companies and manufacturing companies, where the non-manufacturing entities discloses slightly better (see chart 4.5). The difference is more evident in the beginning of the investigation, as the graphs for the two industries in the chart become more similar to each other in the end of the period. Therefore, the chart proposes that a certain relationship between companies' disclosure levels and the industry exists.

The regression analysis showed a p-value of 0,094 for the manufacturing variable, suggesting that the industry-type impacts the compliance level at a level of 0,10. This argument does not hold at a significance level of 0,05. A reasonable explanation for the difference in compliance level between the two industries could be that companies may have different goodwill/total assets- ratios, which implies that the goodwill is more important for some industries compared to others, resulting in a higher compliance level. However, this study does not examine the importance of the goodwill for each company, which makes it impossible to state whether the goodwill/total asset-ratio could explain this outcome.

Glaum et al. (2013) and Hartwig (2013) have also examined the role of the industry-type and both argue for the variable to be significant, which is in line with the indications of this study. A possible argument for the negative association at a lower significance level is that this study only considers two types of industries, which is different from previous studies. Glaum et al. (2013) tested for three different industries while Hartwig (2013) did a similar study to this, but with other industries.

Moreover, theories of disclosure propose that companies prefer to disclose information with good news. Considering the fact that some industries are more risky than others and that bad news is more prevalent for these companies, it is likely that these firms withhold information and that a lower compliance level is therefore preferred. Further, some industries may be more sensitive to the consequences of revealing bad news com-

pared to others, hence, when uncertainties of the consequences are experienced, companies become more careful in disclosing information that could harm the entity.

6 Conclusion and Discussion

6.1 Conclusion

This study aimed at examining to what extent the Swedish listed companies complied with the disclosure requirements in IAS 36. The findings illustrates that insufficient disclosures of the goodwill impairment test is evident for many of the Swedish listed companies. Over the nine-year period, 2005-2013, cautious improvements of the disclosure levels were observed, however, full compliance is still not achieved by the companies. The highest compliance levels were noticed among the fundamental disclosure criteria and almost all information that was required for these criteria was presented in the financial reports. The more specific disclosure criteria, related to the method used, demonstrated more deficient disclosures and the information related to these disclosure requirements was often limited and inadequate.

The analysis section provided explanations for the existence of the non-compliance among the listed companies in Sweden. One possible explanation for its' existence was found to be related to the cost-benefit approach in the disclosure theory. This approach stresses the necessity of the disclosures to be more beneficial than costly for the companies. The complexity of the standard was another explanations for the non-compliance, as the application and interpretation of the standard becomes more challenging for the entities. Since the study observed the companies over a period, the experience of the standard is obviously an explanatory factor for the non-compliance. Lastly, the study describes the non-compliance with the interpretation opportunity that companies possesses, due to the fact that IAS 36 is a principle-based standard.

The study further aimed at investigating how certain company characteristics affected companies' compliance levels. An assessment was carried out to clarify whether the variables were decisive for the disclosure behavior or not. The size-variable was treated separately from the other characteristics and it is more likely for this variable to be influential for the compliance level rather than not, when weighing the findings of the study. This implies that the listing-type, which is referred to size, influences the degree of compliance with the standard. Another positively associated variable was the industry, hence, companies' industry-types impacts the disclosure behavior. This implies that the industry variable is considered to be an equally influencing factor as the size, in an

overall assessment. Other company characteristics that were examined, the age and the audit firm, showed a negative association with companies' disclosure levels, when weighting the outcomes together. Hence, it is more likely that these variables are not equally important factors in explaining the compliance level of Swedish listed companies.

6.2 Discussion

Along the way of the investigation, some concerns have arisen regarding the standard. These concerns are mainly related to the complexity of the standard and have been noticed through different ways. Along with the examination of the notes, the authors saw some worrying signs regarding the impairment test of goodwill. It was clear, for many of the companies, that the information in the notes was identical from one year to another, which applied for the entire investigation period. Adding information in certain years was evident, however, the information in the notes from previous years was always presented in the next year. This gave the authors good reasons to question the effectiveness of the standard. The information in the notes was perceived as being prepared in a routine and whether the management has put effort in preparing the disclosures of the impairment test remains unclear. The explanation for this problem could be found in companies' efforts to ensure the approval of their financial reports by the audit firms, which simply implies to disclose identical information in the coming years.

However, a more reasonable explanation for this may be related to the complexity of the standard as well as the cost of interpreting, preparing and disclosing the information. It seemed, from the findings, that the more specific criteria were more complex in nature since the disclosure levels related to these requirements were more deficient. The degree of sensitivity that the information possesses could also contribute to the lower level of compliance in these requirements. Due to the insufficient disclosures, concerns of the audit work aroused. If the regulating bodies, such as the auditors, express no remarks companies are unlikely to improve their disclosures. Hence, it is unreasonable to expect the companies to increase the level of information. This concern stresses the necessity of enhanced assessments by the auditors or stricter guidelines on how to evaluate the information in the notes.

It is worrying that this study showed modest improvements over the nine-year period and that the optimal disclosure level was still not obtained in year 2013. This indicates that the guidelines on how to apply the standard are insufficient. Therefore, another concern emerged, questioning whether the standard should be rules-based rather than principle-based. It seems to be lack of guidance in the standard, since companies fails to comply with many of the criteria, which explains why the standard should move towards a more rules-based standard. IAS 36 is complex in nature, leading to interpretation difficulties. Hence, reducing the possibility of reaching a full compliance level. Principle-based standards leave room for interpretation, which jeopardizes the comparability of companies' financial reports.

As an overall concern of the standard, the question of whether IAS 36 is considered to be effective or not, emerged. This question is derived from the fact that companies only comply with the standard to a certain extent, which is not what the standard intends. IASB requires all necessary information to be disclosed in order for the market operators to make informed decisions, incomplete information does not contribute to informed decisions. The problem of partial compliance may emerge from the managements' ignorance of understanding and applying the standard accurately, resulting in that only the criteria that are clearly described are followed. With a lack of knowledge on how to apply the standard, the question of whether the impairment tests are properly conducted and seen as reliable arises. A proposed solution for the partial compliance could be to strengthen the enforcement system for listed companies in Sweden, since the standard is useless if it is not fulfilling its purpose. With a stricter enforcement system, higher pressure is put on the management to adopt the standard correctly. Hence, it becomes more likely to achieve an optimal disclosure level and the reliability of the impairment tests may increase.

6.2.1 Contribution of the Study

An assessment of the goodwill impairment notes has been conducted in this study and the findings demonstrated that companies provide inadequate disclosures. The issue of non-compliance among Swedish listed companies should be interesting for different parties, which has the ability of influencing and remedy the problem. The awareness of the issue is seen as the initial phase for sufficient and adequate disclosures. The interest-

ed parties for this study should be the users of the financial statements, the issuers of the standards, the practitioners of IFRS and lastly, the auditors.

The interest of the users is derived from their willingness of making well-informed decisions, which stresses the necessity of complete disclosures, in order to obtain a full understanding of the company. From the issuer's perspective, the findings of this study should be worrying, since it indicates that the standard is not fulfilling its purpose. The results should encourage IASB to reflect upon the usefulness of the standard as well as the issue of compliance. Further, the issue should be interesting for the management since the findings proves that enhancement of disclosure is necessary. The results confirm that they are not applying the standard successfully since the optimal level of disclosure is still not reached. Hence, the management should become aware of this issue to be able to make corrective actions. The auditors should perceive the existence of non-compliance as concerning and should consider becoming stricter in requiring the necessary information. With an increasing effort from all parties, it is more likely to reach a full disclosure level.

6.2.2 Suggestions for Further Research

This study confirms the existence of non-compliance among Swedish listed companies during a nine-year period, starting from the implementation year in 2005 until 2013. With this in mind, it would be interesting to conduct a similar study but in a different context. The investigation could be applied to European countries to clarify whether the adoption of the IFRS framework has led to a more harmonized accounting and reporting system across Europe, which the implementation aimed at. This would also prove which countries that experiences the most severe interpretation problems of the standard and which countries that are in need of urgent solutions for the non-compliance.

The research examined the notes from the user's perspective to see whether the required information was presented. Therefore, another suggestion for further research could be to investigate the notes from other perspectives, in order to address how the information has been prepared as well as assessed. Examination of the notes, from another perspective, enables the researchers to become aware of the reasoning of the management, which increases the understanding of the notes. Further, it may explain how the man-

agement has interpreted the standard and whether they perceive the standard as complex. It would also be interesting to review the notes from the auditor's point of view, to investigate how their assessments are carried out and what they emphasize in their evaluation of the notes. Moreover, a comparison of the auditors' assessment processes would be useful and might explain the differences in the disclosures.

Since the findings found that companies provided identical information in the financial reports, another suggestions would be to perform a similar study to this, but with another focus. The focus could be to assess the quality of the information by counting the words within the notes, to see what information that actually changes from one year to another. Thus, clarify how useful the information is.



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Appendix

Appendix 1

2013	Fundamental Requirements		Value in Use					Fair value – cost to sell							Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	FV Hierarchy	Alternative valuation method used	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																			
LARGE CAP																			
Volvo	1	1						*	0	0	0	*	*	1	NA	NA	NA	3/9	33 %
Ericsson	1	1	1	*	1	0	1								NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*								1	1	0	8/10	80 %
Electrolux	1	1	1	1	1	0	1								NA	NA	NA	6/7	86 %
TeliaSonera	1	1	1	1	1	1	1								1	1	1	10/10	100 %
Svenska Cellulosa	1	1	1	0	0	1	1								NA	NA	NA	5/7	71 %
Sandvik	1	1	1	0	1	1	1								1	0	0	7/10	70 %
ICA Gruppen	1	1	1	0	*	1	1								1	0	0	6/10	60 %
Atlas Copco	1	1	1	1	1	1	1								NA	NA	NA	7/7	100 %
Securitas	1	1	1	1	1	*	*								NA	NA	NA	5/7	71 %
Scores obtained with-in the list / Total possible	10/10	10/10	9/9	5/9	7/9	6/9	7/9	0/1	0/1	0/1	0/1	0/1	0/1	1/1	4/4	2/4	1/4		
In %	100 %	100 %	100 %	56 %	78 %	67 %	78 %	0 %	0 %	0 %	0 %	0 %	0 %	100 %	100 %	50 %	25 %		
MID CAP																			
Bilia	1	1	1	1	1	1	1								NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1								0	1	1	9/10	90 %
ÅF	1	1	1	1	0	*	1								0	0	1	6/10	60 %
Lindab Int.	1	1	1	0	0	1	1								NA	NA	NA	5/7	71 %
Beijer Ref	0	1	1	1	1	0	1								NA	NA	NA	5/7	71 %
Mekonomen	1	1	1	1	*	1	1								NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	1	1	1								NA	NA	NA	5/7	71 %
Nolato	1	1	1	0	1	1	1								NA	NA	NA	6/7	86 %
Qliro Group	1	1	1	0	1	1	1								NA	NA	NA	6/7	86 %
Proffice	1	1	1	0	1	1	1								NA	NA	NA	6/7	86 %
Scores obtained with-in the list / Total possible	9/10	10/10	9/10	5/10	7/10	8/10	10/10								0/2	1/2	2/2		
In %	90 %	100 %	90 %	50 %	70 %	80 %	100 %								0 %	50 %	100 %		

Appendix

SMALL CAP																				
Bulten	0	1	1	0	1	1	1							NA	NA	NA	5/7	71 %		
Bong	0	1	0	1	1	1	1							1	0	1	7/10	70 %		
Semcon	1	1	0	0	0	1	1							NA	NA	NA	4/7	57 %		
Midway Holding	0	1	1	0	0	1	1							NA	NA	NA	4/7	57 %		
Proact IT Group	1	1	0	0	1	1	*							NA	NA	NA	4/7	57 %		
PartnerTech	1	1	1	1	1	*	1							NA	NA	NA	6/7	86 %		
Elanders	1	1	0	0	0	1	1							NA	NA	NA	4/7	57 %		
Knowit	1	1	0	0	1	1	1							NA	NA	NA	5/7	71 %		
Rejlers	1	1	1	1	1	1	1							0	1	1	9/10	90 %		
Addnode Group	1	1	1	1	1	1	1							NA	NA	NA	7/7	100 %		
Scores obtained within the list / Total possible	7/10	10/10	5/10	4/10	7/10	9/10	9/10							1/2	1/2	2/2				
In %	70 %	100 %	50 %	40 %	70 %	90 %	90 %							50 %	50 %	100 %				

Appendix

Appendix 2

2012	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						*	0	*	*	1	NA	NA	NA	3/9	33 %
Ericsson	1	1	1	*	1	0	1						NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*						NA	NA	NA	6/7	86 %
Electrolux	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
TeliaSonera	1	1	1	1	1	1	1						0	1	1	9/10	90 %
Svenska Cellulosa	1	1	1	0	0	1	1						1	0	0	6/10	60 %
Sandvik	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
ICA Gruppen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Atlas Copco	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Securitas	1	1	1	1	1	*	*						1	0	1	7/10	70 %
Scores obtained within the list / Total possible	10/10	10/10	9/9	5/9	8/9	6/9	7/9	0/1	0/1	0/1	0/1	1/1	2/3	1/3	2/3		
In %	100 %	100 %	100 %	56 %	89 %	67 %	78 %	0 %	0 %	0 %	0 %	100 %	67 %	33 %	67 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	0	1						0	1	1	8/10	80 %
ÅF	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Lindab Int.	1	1	1	0	0	1	1						NA	NA	NA	5/7	71 %
Beijer Ref	0	1	1	1	1	0	1						NA	NA	NA	5/7	71 %
Mekonomen	1	1	1	1	*	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Nolato	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Qliro Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Proffice	1	1	*	0	0	1	1						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	9/10	10/10	6/10	4/10	6/10	8/10	10/10						0/1	1/1	1/1		
In %	90 %	100 %	60 %	40 %	60 %	80 %	100 %						0 %	100 %	100 %		

Appendix

SMALL CAP																	
Bulten	0	1	1	0	1	1	1						NA	NA	NA	5/7	71 %
Bong	0	1	0	1	1	1	1						NA	NA	NA	5/7	71 %
Semcon	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	1	1						0	0	1	6/10	60 %
PartnerTech	1	1	1	1	1	*	1						NA	NA	NA	6/7	86 %
Elanders	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Knowit	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Rejlers	1	1	1	1	1	1	1						0	1	1	9/10	90 %
Addnode Group	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Scores obtained within the list / Total possible	7/10	10/10	5/10	4/10	7/10	9/10	10/10						0/2	1/2	2/2		
In %	70 %	100 %	50 %	40 %	70 %	90 %	100 %						0 %	50 %	100 %		

Appendix

Appendix 3

2011	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	*	0	1	NA	NA	NA	3/7	43 %
Ericsson	1	1	1	*	1	0	1						NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*						1	0	0	7/10	70 %
Electrolux	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
TeliaSonera	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Svenska Cellulosa	1	1	1	0	0	1	1						1	0	0	6/10	60 %
Sandvik	1	1	1	0	1	1	1						1	0	0	7/10	70 %
ICA Gruppen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Atlas Copco	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Securitas	1	1	1	0	1	1	*						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	10/10	10/10	9/9	4/9	8/9	7/9	7/9	0/1	0/1	0/1	0/1	1/1	3/3	0/3	0/3		
In %	100 %	100 %	100 %	44 %	89 %	78 %	78 %	0 %	0 %	0 %	0 %	100 %	100 %	0 %	0 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
ÅF	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Lindab Int.	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Beijer Ref	0	1	1	1	1	0	1						NA	NA	NA	5/7	71 %
Mekonomen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Nolato	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Qliro Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Proffice	1	1	*	0	0	1	1						1	1	1	7/10	70 %
Scores obtained within the list / Total possible	9/10	10/10	6/10	3/10	7/10	9/10	10/10						1/1	1/1	1/1		
In %	90 %	100 %	60 %	30 %	70 %	90 %	100 %						100 %	100 %	100 %		

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SMALL CAP																	
Bulten	0	1	1	0	1	1	1						NA	NA	NA	5/7	71 %
Bong	0	1	0	1	1	*	1						NA	NA	NA	4/7	57 %
Semcon	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
PartnerTech	1	1	0	1	1	*	1						NA	NA	NA	5/7	71 %
Elanders	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Knowit	1	1	0	0	1	1	1						0	1	0	6/10	60 %
Rejlers	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Addnode Group	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Scores obtained within the list / Total possible	7/10	10/10	4/10	4/10	7/10	8/10	10/10						0/1	1/1	0/1		
In %	70 %	100 %	40 %	40 %	70 %	80 %	100 %						0 %	100 %	0 %		

Appendix

Appendix 4

2010	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	*	0	1	NA	NA	NA	3/7	43 %
Ericsson	1	1	1	*	1	0	1						NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*						1	1	0	8/10	80 %
Electrolux	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
TeliaSonera	1	1	1	1	1	1	1						0	0	0	7/10	70 %
Svenska Cellulosa	1	1	1	0	0	1	1						NA	NA	NA	5/7	71 %
Sandvik	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
ICA Gruppen	1	1	1	0	1	1	1						1	0	0	7/10	70 %
Atlas Copco	1	1	1	1	1	1	1						0	0	0	7/10	70 %
Securitas	1	1	1	0	1	*	*						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	10/10	10/10	8/9	4/9	8/9	6/9	7/9	0/1	0/1	0/1	0/1	1/1	2/4	1/4	0/4		
In %	100 %	100 %	89 %	44 %	89 %	67 %	78 %	0 %	0 %	0 %	0 %	100 %	50 %	25 %	0 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
ÅF	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Lindab Int.	1	1	0	0	1	1	1						1	0	0	6/10	60 %
Beijer Ref	0	1	1	1	1	0	1						NA	NA	NA	5/7	71 %
Mekonomen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Nolato	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Qliro Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Proffice	1	1	*	1	1	1	*						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	9/10	10/10	4/10	4/10	8/10	8/10	9/10						1/1	0/1	0/1		
In %	90 %	100 %	40 %	40 %	80 %	80 %	90 %						100 %	0 %	0 %		

Appendix

SMALL CAP																	
Bulten	0	1	1	0	1	1	1						NA	NA	NA	5/7	71 %
Bong	0	1	0	1	1	*	1						NA	NA	NA	4/7	57 %
Semcon	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
PartnerTech	1	1	0	1	1	0	*						NA	NA	NA	4/7	57 %
Elanders	0	1	0	0	0	1	1						NA	NA	NA	3/7	43 %
Knowit	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Rejlers	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Addnode Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	6/10	10/10	3/10	3/10	8/10	8/10	9/10						0/0	0/0	0/0		
In %	60 %	100 %	30 %	30 %	80 %	80 %	90 %						0 %	0 %	0 %		

Appendix

Appendix 5

2009	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	*	0	1	NA	NA	NA	3/7	43 %
Ericsson	1	1	1	*	1	0	1						NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*						1	1	0	8/10	80 %
Electrolux	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
TeliaSonera	1	1	1	1	1	1	1						0	0	1	8/10	80 %
Svenska Cellulosa	1	1	1	0	0	0	1						NA	NA	NA	4/7	57 %
Sandvik	1	1	0	0	1	*	0						1	0	0	4/10	40 %
ICA Gruppen	1	1	1	0	1	*	*						NA	NA	NA	4/7	57 %
Atlas Copco	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Securitas	1	1	1	0	1	1	*						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	10/10	10/10	8/9	4/9	8/9	3/9	5/9	0/1	0/1	0/1	0/1	1/1	2/3	1/3	1/3		
In %	100 %	100 %	89 %	44 %	89 %	33 %	56 %	0 %	0 %	0 %	0 %	100 %	67 %	33 %	33 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1						0	0	1	8/10	80 %
ÅF	1	1	0	0	0	*	1						NA	NA	NA	3/7	43 %
Lindab Int.	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Beijer Ref	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Mekonomen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	0	1	1						1	1	1	7/10	70 %
Nolato	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Qliro Group	1	1	0	0	1	0	0						NA	NA	NA	3/7	43 %
Proffice	1	1	*	0	1	1	*						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	10/10	10/10	4/10	3/10	8/10	6/10	8/10						1/2	1/2	2/2		
In %	100 %	100 %	40 %	30 %	80 %	60 %	80 %						50 %	50 %	100 %		

Appendix

SMALL CAP																	
Bulten	0	1	0	0	1	1	1						NA	NA	NA	4/7	57 %
Bong	0	1	0	1	1	*	1						NA	NA	NA	4/7	57 %
Semcon	1	1	0	0	1	1	1						0	0	0	5/10	50 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
PartnerTech	1	1	0	1	1	0	1						NA	NA	NA	5/7	71 %
Elanders	0	1	0	0	0	1	1						0	0	1	4/10	40 %
Knowit	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Rejlers	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Addnode Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	6/10	10/10	2/10	3/10	8/10	7/10	10/10						0/2	0/2	1/2		
In %	60 %	100 %	20 %	30 %	80 %	70 %	100 %						0 %	0 %	50 %		

Appendix

Appendix 6

2008	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	1	0	1	NA	NA	NA	4/7	57 %
Ericsson	1	1	1	*	1	0	1						NA	NA	NA	5/7	71 %
Skanska	1	1	1	1	1	1	*						NA	NA	NA	6/7	86 %
Electrolux	1	0	0	1	1	0	1						NA	NA	NA	4/7	57 %
TeliaSonera	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
Svenska Cellulosa	1	1	1	0	0	0	1						NA	NA	NA	4/7	57 %
Sandvik	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
ICA Gruppen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Atlas Copco	1	1	1	1	1	*	1						NA	NA	NA	6/7	86 %
Securitas	1	1	1	0	1	1	*						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	10/10	9/10	7/9	4/9	8/9	4/9	7/9	0/1	0/1	1/1	0/1	1/1	0/0	0/0	0/0		
In %	100 %	90 %	78 %	44 %	89 %	44 %	78 %	0 %	0 %	100 %	0 %	100 %	0 %	0 %	0 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						0	0	0	7/10	70 %
SWECO	1	1	1	1	1	1	1						0	0	1	8/10	80 %
ÅF	1	0	0	0	0	*	1						NA	NA	NA	2/7	29 %
Lindab Int.	1	0	0	0	1	1	1						NA	NA	NA	4/7	57 %
Beijer Ref	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Mekonomen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Nolato	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Qliro Group	1	1	0	0	1	0	0						0	0	0	3/10	30 %
Proffice	1	1	*	0	1	1	*						0	0	0	4/10	40 %
Scores obtained within the list / Total possible	10/10	8/10	4/10	3/10	8/10	6/10	8/10						0/4	0/4	1/4		
In %	100 %	80 %	40 %	30 %	80 %	60 %	80 %						0 %	0 %	25 %		

Appendix

SMALL CAP																	
Bulten	0	1	0	0	0	1	1						1	0	0	4/10	40 %
Bong	0	1	0	1	1	*	1						NA	NA	NA	4/7	57 %
Semcon	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
PartnerTech	1	1	0	0	1	0	1						0	0	0	4/10	40 %
Elanders	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Knowit	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Rejlers	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Addnode Group	1	1	0	0	1	1	1						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	7/10	10/10	2/10	2/10	7/10	6/10	10/10						1/2	0/2	0/2		
In %	70 %	100 %	20 %	20 %	70 %	60 %	100 %						50 %	0 %	0 %		

Appendix

Appendix 7

2007	Fundamental Requirements	Value in Use						Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	1	0	1	NA	NA	NA	4/7	57 %
Ericsson	1	0	1	*	1	0	1						NA	NA	NA	4/7	57 %
Skanska	1	1	1	1	1	1	*						1	1	0	8/10	80 %
Electrolux	1	0	0	1	1	*	1						NA	NA	NA	4/7	57 %
TeliaSonera	1	1	1	1	1	*	*						0	0	0	5/10	50 %
Svenska Cellulosa	1	1	1	0	0	0	1						NA	NA	NA	4/7	57 %
Sandvik	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
ICA Gruppen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Atlas Copco	1	1	1	0	1	*	1						NA	NA	NA	5/7	71 %
Securitas	1	1	1	0	1	1	*						1	0	1	7/10	70 %
Scores obtained within the list / Total possible	10/10	8/10	7/9	3/9	8/9	3/9	6/9	0/1	0/1	1/1	0/1	1/1	2/3	1/3	1/3		
In %	100 %	80 %	78 %	33 %	89 %	33 %	67 %	0 %	0 %	100 %	0 %	100 %	67 %	33 %	33 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1						0	0	1	8/10	80 %
ÅF	1	0	0	0	0	*	1						NA	NA	NA	2/7	29 %
Lindab Int.	1	0	0	0	1	1	1						NA	NA	NA	4/7	57 %
Beijer Ref	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Mekonomen	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Gunnebo	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Nolato	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Qliro Group	1	1	0	0	0	0	0						NA	NA	NA	2/7	29 %
Proffice	1	1	*	0	1	1	*						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	10/10	8/10	4/10	3/10	7/10	6/10	8/10						0/1	0/1	1/1		
In %	100 %	80 %	40 %	30 %	70 %	60 %	80 %						0 %	0 %	100 %		

Appendix

SMALL CAP																	
Bulten	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Bong	0	1	0	1	1	*	1						NA	NA	NA	4/7	57 %
Semcon	1	1	0	0	1	0	1						0	0	0	4/10	40 %
Midway Holding	0	1	1	0	0	1	1						NA	NA	NA	4/7	57 %
Proact IT Group	1	1	0	0	1	*	1						1	0	1	6/10	60 %
PartnerTech	1	1	0	1	1	0	1						1	0	0	6/10	60 %
Elanders	1	1	1	0	0	1	1						NA	NA	NA	5/7	71 %
Knowit	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Rejlers	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Addnode Group	1	1	0	0	1	*	1						0	0	1	5/10	50 %
Scores obtained within the list / Total possible	8/10	10/10	3/10	3/10	6/10	4/10	10/10						2/4	0/4	2/4		
In %	80 %	100 %	30 %	30 %	60 %	40 %	100 %						50 %	0 %	50 %		

Appendix

Appendix 8

2006	Fundamental Requirements		Value in Use					Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	1	0	1	NA	NA	NA	4/7	57 %
Ericsson	0	0	1	*	1	0	1						NA	NA	NA	3/7	43 %
Skanska	1	1	1	1	1	1	*						NA	NA	NA	6/7	86 %
Electrolux	1	0	0	1	1	0	1						NA	NA	NA	4/7	57 %
TeliaSonera	1	1	1	1	1	0	1						0	0	1	7/10	70 %
Svenska Cellulosa	1	1	1	0	1	0	1						NA	NA	NA	5/7	71 %
Sandvik	1	1	0	0	1	*	1						1	0	0	5/10	50 %
ICA Gruppen	0	1	1	0	1	1	1						NA	NA	NA	5/7	71 %
Atlas Copco	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
Securitas	1	1	1	0	1	1	*						1	0	1	7/10	70 %
Scores obtained within the list / Total possible	8/10	8/10	6/9	3/9	9/9	3/9	7/9	0/1	0/1	1/1	0/1	1/1	2/3	0/3	2/3		
In %	80 %	80 %	67 %	33 %	100 %	33 %	78 %	0 %	0 %	100 %	0 %	100 %	67 %	0 %	67 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	1	1						0	0	1	8/10	80 %
ÅF	1	1	1	0	0	*	1						0	0	0	4/10	40 %
Lindab Int.	1	0	0	0	1	1	1						NA	NA	NA	4/7	57 %
Beijer Ref	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
Mekonomen	1	1	1	0	1	0	1						NA	NA	NA	5/7	71 %
Gunnebo	1	1	0	0	0	0	1						NA	NA	NA	3/7	43 %
Nolato	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Qliro Group	1	1	0	0	0	0	1						0	0	0	3/10	30 %
Proffice	1	1	*	0	1	1	*						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	10/10	9/10	5/10	3/10	7/10	4/10	9/10						0/3	0/3	1/3		
In %	100 %	90 %	50 %	30 %	70 %	40 %	90 %						0 %	0 %	33 %		

Appendix

SMALL CAP																	
Bulten	1	1	0	0	0	1	1						1	0	0	5/10	50 %
Bong	1	1	*	1	1	1	1						NA	NA	NA	6/7	86 %
Semcon	1	1	0	0	0	1	1						0	0	0	4/10	40 %
Midway Holding	0	1	1	0	0	1	1						0	0	0	4/10	40 %
Proact IT Group	1	1	0	0	1	*	1						1	0	1	6/10	60 %
PartnerTech	1	1	0	0	1	0	1						NA	NA	NA	4/7	57 %
Elanders	1	1	1	0	0	1	1						NA	NA	NA	5/7	71 %
Knowit	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Rejlers	1	1	1	1	1	0	1						0	1	1	8/10	80 %
Addnode Group	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
Scores obtained within the list / Total possible	9/10	10/10	3/10	2/10	5/10	6/10	10/10						2/5	1/5	2/5		
In %	90 %	100 %	30 %	20 %	50 %	60 %	100 %						40 %	20 %	40 %		

Appendix

Appendix 9

2005	Fundamental Requirements	Value in Use						Fair value – cost to sell					Impairment loss				
	Carrying amount of allocated GW	Basis used (VIU or FV)	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Key assumptions of CF projections	Description of key assumption values	Duration of CF projections	Growth rate	Discount rate	Deviating amount	Value of the key assumptions	Change in value	Scores obtained / Total possible	In %
Company names																	
LARGE CAP																	
Volvo	1	1						0	0	0	0	1	NA	NA	NA	3/7	43 %
Ericsson	0	0	1	*	0	0	1						NA	NA	NA	2/7	29 %
Skanska	1	1	1	1	1	0	0						1	0	0	6/10	60 %
Electrolux	1	0	0	0	1	0	1						NA	NA	NA	3/7	43 %
TeliaSonera	1	1	1	1	0	0	1						NA	NA	NA	5/7	71 %
Svenska Cellulosa	1	1	1	0	1	0	0						NA	NA	NA	4/7	57 %
Sandvik	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
ICA Gruppen	0	1	1	0	1	1	1						NA	NA	NA	5/7	71 %
Atlas Copco	1	1	1	0	1	*	1						NA	NA	NA	5/7	71 %
Securitas	1	1	1	0	1	1	*						NA	NA	NA	5/7	71 %
Scores obtained within the list / Total possible	8/10	8/10	7/9	2/9	7/9	2/9	6/9	0/1	0/1	0/1	0/1	1/1	1/1	0/1	0/1		
In %	80 %	80 %	78 %	22 %	78 %	22 %	67 %	0 %	0 %	0 %	0 %	100 %	100 %	0 %	0 %		
MID CAP																	
Bilia	1	1	1	1	1	1	1						NA	NA	NA	7/7	100 %
SWECO	1	1	1	1	1	0	1						NA	NA	NA	6/7	86 %
ÅF	1	*	0	0	0	*	1						0	0	0	2/10	20 %
Lindab Int.	1	0	0	0	1	0	1						NA	NA	NA	3/7	43 %
Beijer Ref	1	1	0	0	1	0	0						NA	NA	NA	3/7	43 %
Mekonomen	1	0	0	0	0	0	0						NA	NA	NA	1/7	14 %
Gunnebo	1	1	0	0	0	0	0						NA	NA	NA	2/7	29 %
Nolato	1	1	1	0	1	1	1						NA	NA	NA	6/7	86 %
Qliro Group	1	0	0	0	1	0	1						0	0	0	3/10	30 %
Proffice	1	1	*	0	1	1	*						0	0	0	4/10	40 %
Scores obtained within the list / Total possible	10/10	6/10	3/10	2/10	7/10	3/10	6/10						0/3	0/3	0/3		
In %	100 %	60 %	30 %	20 %	70 %	30 %	60 %						0 %	0 %	0 %		

Appendix

SMALL CAP																	
Bulten	1	1	0	0	0	1	1						NA	NA	NA	4/7	57 %
Bong	1	1	*	1	1	1	1						NA	NA	NA	6/7	86 %
Semcon	0	0	0	0	0	1	0						NA	NA	NA	1/7	14 %
Midway Holding	0	1	1	0	0	1	1						1	0	0	5/10	50 %
Proact IT Group	1	1	0	0	1	*	1						NA	NA	NA	4/7	57 %
PartnerTech	0	1	0	0	1	0	1						NA	NA	NA	3/7	43 %
Elanders	1	1	1	0	0	1	1						NA	NA	NA	5/7	71 %
Knowit	0	1	0	1	0	1	1						NA	NA	NA	4/7	57 %
Rejlers	0	0	0	0	0	0	0						NA	NA	NA	0/7	0 %
Addnode Group	1	1	0	0	1	*	1						0	0	0	4/10	40 %
Scores obtained within the list / Total possible	5/10	8/10	2/10	2/10	4/10	6/10	8/10						1/2	0/2	0/2		
In %	50 %	80 %	20 %	20 %	40 %	60 %	80 %						50 %	0 %	0 %		