COMPREHENSIBILITY AND TRANSPARENCY OF THE IMPAIRMENT TESTS IN CONTEXTS OF CRISIS

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Abstract

The application of Impairment Test on Goodwill is one of the most debated issues in the international arena, both in relation to the multiple profiles of subjectivity inherent in the valuation criteria set out in IAS 36 and in relation to the novelty that brings this procedure. For this reason, in our work we analyze Goodwill, Impairment Test and the international regulations governing them that are IAS 36 and IFRS 3. The Goodwill is an important asset for some companies, an intangible asset that arises as a result of the acquisition of one company by another for a premium value. Its assessment is, however, discretionary. Main objective of this paper is to analyze this discretionary and check whether the information resulting from the Impairment Test on Goodwill is in accordance with the provisions of IAS 36. The empirical analysis has been developed on a selected sample relative to utilities in Europe who had recorded higher Goodwill in 2012. The results show that disclosures do not always conform to the requirements of IAS 36; in particular, there is a reluctance of the company managements in providing quantitative information about the sensitivity analysis of the Impairment Test results. The practical implications lead to stress that the reader of the financial statements is not facilitated, not only he fails to assess the effects on the recoverability of the value but also to recognize the reliability of the estimates.

Keywords: Financial Reporting, Impairment Tests, Goodwill, Intangible Assets, Financial Crisis, IAS 36

1. INTRODUCTION

The information plays a fundamental role in the satisfaction of all stakeholders. Clear and effective disclosure is a prerequisite for setting up a solid and lasting relationship between the company and investors. The financial communication plays a vital role in improving the efficiency of the market.

The informational efficiency of the market is very important; in particular, for listed companies, as it is the most important prerequisite for obtaining the result of efficient allocation of capital (Fama, 1970; Gilson and Kraakman, 1984; Perrone, 2003; Avgouleas, 2005). Moreover, the presence of a clear and structured information environment can make the contractor confident in the company especially in a sector unrelated to his work, it helps to establish an ongoing and qualified relationship with investors and strengthen its strategic and operational credibility, attracts new resources such as managers and professionals to the company.

This paper, in order to analyze the importance of transparency in the corporate, looks at disclosures related to Impairment Tests on Goodwill and other intangible assets (IAS 38) with an indefinite useful life and recorded write-downs in general in the financial statements of European utilities in 2012.

The application of Impairment Test on Goodwill is one of the most debated issues in the international arena, both in relation to multiple profiles of subjectivity inherent in the valuation criteria set out in IAS 36 and in relation to the novelty that brings this procedure.

The aim of our work is to analyze the clarity and reliability of estimates in the application of these tests in order to comply with the regulations imposed by Italian legislation and European Union regulations. The national legislature, in fact, implementing Regulation 1606/02 of the European Community, has extended to all listed companies the adoption of IAS/IFRS and the opportunity for all other companies to do the same (OIC, 2007).

The Goodwill recorded in the financial statements of the utilities derived from business combination and purchasing of previous years where the economic and financial conditions were very different when compared with actual market conditions (Bianchi, 2008). After the failure of Lehman Brothers in September 2008[1], many noteworthy events shocked global capital markets during that unforgettable month. The starting crisis in subprime and financial statements had translated to the real economy, leading to a long recession phase in the economic system (Anderson, 2008 and White, 2008). The impact of the crisis has been reflected in financial statements, so that significant write-offs of assets have been recorded.

1 Lehman Brothers closed its bank dedicated to subprime loans, BNC Mortgage, eliminating 1,200 jobs in 23 locations and recorded a loss after tax of U.S. $ 25 million and a reduction of $ 27 million of Goodwill (Anderson, 2008; White, 2008)

There is a huge difference between the accounting rule on Goodwill in the International Financial Reporting Standards (IFRS) and the Italian Accounting Principles (Pozzoli, 2007). The IFRS does not record an amortization of Goodwill and other intangible assets with an indefinite useful life, but requires that the recoverability of the carrying amount is verified at least once a year (so-called 'Impairment Test').

The prolonged economic stagnation and forecasts for a future growth of the European economy have generated significant write-downs in the financial statements, because these factors have a strong influence in determining the Recoverable Amount of the assets recorded.

When directors of entities perform the Impairment Test, they are required to use the best estimate on the future, to consider historical results and external market conditions. The test requires a number of important estimates that are based on the future expectations of the business and the results of the measures taken.

Making predictions in a context of economic crisis can be a very complex exercise. The directors of entities have to predict future events in a very uncertain market environment, with a high risk of developing plans in the medium term based on erroneous assumptions.

Appropriate disclosures should allow users to evaluate the choices made by the directors in the determination of the recoverability of the carrying amounts. In particular, disclosures should make clear the main assumptions used for the determination of future cash flows, and the most important parameters, and describe the process of estimating these variables. Estimating future cash flows involve the prediction of future events, both with regard to their materialization and with regard to their extent and the timing of their expression, and such estimates could generate deviations between actual and forecast values, even if the events planned in the context of hypothetical assumptions, and used for the preparation of economic and financial projections, should take place. Disclosures should enable the user to understand the key risk factors and describe the level of uncertainty in the determination of the Recoverable Amounts. The Impairment Test requires that the cash generating units ("CGU") to which Goodwill from a previous business combination can be allocated are defined. An important point is that the method by which entities must perform the test is not defined, so that those preparing disclosures must define their method and apply it consistently. It is very important to have a clear disclosure because users have to understand the method and if it has been changed over time. IAS 36, which will be discussed later, permits a change in the method of performing the Impairment Test when a company has undergone a real change in structure or if a new method can improve on the old, but the line between an improvement in the method and opportunistic behavior is very fine.

In the first part of this paper, after the definition and interpretation of the main key words, we analyze the different treatment of Goodwill in Italian accounting standards (or some national accounting standards) and International Accounting Standards. The main difference is that the Italian accounting standards require the amortization of goodwill while the International Accounting Standards do not require the amortization of goodwill but they require performing an Impairment Test.

In paragraph 4, we discuss of information asymmetry between prepares and users of financial statements; in particular, we analyze the Agency Theory with a focus on the relationship created between shareholders/investors and managers.

Continuing in our research, in paragraph 5, we analyze in depth the requirements of International Accounting Standards (with specific reference to IAS 36) to perform an impairment test and the related disclosures.

In the final part, in paragraph 6, we perform an empirical analysis on the financial statements of companies that operate in energy sector, while, in paragraph 7, we discuss of final results and our conclusion on the performed research.

In these first elements, you can understand the importance of financial statements communication. Understandable and transparent disclosures allow a full assessment of the sustainability of the recognized amounts and the choices made by managements.

2. DEFINITIONS AND INTERPRETATION

For the purpose of this paper the following terms will have the meaning set forth below:

"Agency Theory" means the agency relationship created between shareholders / investors ("principal") and managers ("agent"), where the first, due to their high number and variety in particular public companies, cannot manage directly the company and delegate such function to the second (Jensen and Meckling, 1976).

"**Cash Generating Unit** or **CGU**" means the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets.

"Equity Book Value" means the net amount of funds invested in a business by its owners, plus any retained earnings. It also calculated as the difference between the total of all recorded assets and liabilities on an company's balance sheet.

"**Fair Value**" means the price that would be received to sell an asset or paid to transfer a liability in orderly transaction between market participants at the measurement date.

"**Goodwill**" means an intangible asset associated with a business combination. Goodwill is recorded when a company acquires (purchases) another company and the purchase price is greater than the combination or net of i) Fair Value of the identifiable tangible assets acquires; and ii) the liabilities that were assumed.

"Impairment Test" means a process to check the recoverability of non-current assets recorded in balance sheets of companies. It includes identifying impairment indicators (or trigger events), assessing or reassessing the cash flows, determining the discount rates, testing the reasonableness of the assumptions and benchmarking the assumptions with the market.

"**Market Capitalization**" means the total market value of a company's outstanding shares. It is calculated by multiplying a company's shares

outstanding by the current market price of one share.

"**Recoverable Amount**" means the higher of an asset's Fair Value less costs of disposal and its Value in Use.

"Value in Use" means the present value of the future cash flows expected to be derived from an asset or Cash Generating Unit.

3. THE DIFFERENT TREATMENT OF GOODWILL IN THE ITALIAN ACCOUNTING STANDARDS AND IFRS

The Italian accounting standards (Abate *et al.,* 2010, Iori, 2013), which take a revenue and expenses view, require the amortization of all intangible assets to or by defining specific criteria, such as start-up and for the cost of equipment and expansion, or generally providing for depreciation over the remaining useful life (Azzali, 2002). The IFRS (Aa.Vv., 2014, Bauer, 2007; Cavazzoni, 2007; Dezzani *et al.*, 2010, OIC, 2008), which take an asset and liability view, require that Goodwill and intangible assets with an indefinite useful life are not systematically amortized, because they do not exhaust their usefulness in a defined period of time. The International Accounting Standards, however, require that write-downs are highlighted, even on non-durable assets (Abate *et al.,* 2010; Godfrey *et al.,* 2007; OIC, 2005; Saita and Saracino, 2012).

Under the revenue and expenses view (OIC, 2005; Thornton, 2011), income is the difference between output (revenues) and input (expenses) during a given period. The accounting implementation of this approach often requires the allocation of inflows and expenditures over a number of accounting periods in order to produce a 'matching' of reported revenues and expenses over time (for example, the cost of a machine that is used in manufacturing a company's product is allocated over the useful life of the machine, resulting in a series of annual depreciation charges over those years).

Critics of such 'matching' and of the revenues and expenses view as a whole argue that these allocation are often, by necessity, arbitrary and not grounded in the underlying economics; that it results in inappropriate measures of certain assets and liabilities that are the result of these inter-period allocations and that render balance sheets less useful in portraying the current financial position of the reporting entity; and that it adds to the overall complexity of accounting procedures and hampers the understanding of financial reports (Hertz, 2013).

In contrast, under the asset and liability view (Thornton, 2011; EFRAG, 2013), income is a measure of the increase in the net resources of the entity during a certain period, defined primarily in terms of increases in assets and decreases in liabilities. This view is grounded in the economic theory of wealth over a period. Therefore, the accounting implementation of this approach starts with determining and measuring the assets and liabilities of an entity and the changes in its assets and liabilities over a period in order to determine the income for that period.

Critics of the asset and liability view argue that it places undue weight on determining current measurements of assets and liabilities, which can often be difficult and subjective; that it results in reported income that can be highly volatile due to changes in macroeconomic and market conditions; and that it makes the income statement less useful in understanding an entity's actual earnings during a particular reporting period.

Although much of accounting practice until the 1970s was based on the revenue and expenses view, since then, the IASB (International accounting body), the FASB (the United States accounting body), and other accounting standards have generally adopted the asset and liability view in their conceptual framework, seeing it as the conceptually correct and best way to develop standards that are coherent and internally consistent . However, many stakeholders in the reporting system, particularly those who prepare financial statements, do not agree, arguing that the revenue and expenses view is the more conceptually appropriate and practically viable approach. Some are also concerned that the asset and liability view presages the expansion of Fair Value measurements in financial statements, which, for a variety of reasons, they oppose.

3.1. IAS 36 – Impairment of Assets

The International Accounting Standard - IAS 36 *Impairment of Assets* identifies an impairment of an asset whenever the carrying amount exceeds its Recoverable Amount (IAS 36, par.8). In particular, the Recoverable Amount is defined as the higher of Fair Value less costs of disposal and Value in Use (IAS 36, par. 6). The constraint introduced by the standard involves the recognition of impairment when there is a loss of value resulting from conditions both external or internal to the company. Note the opportunity to demonstrate the recoverability of the value represented by the Fair Value or the Value in Use.

IAS 36 requires an assessment at each balance sheet date where there is any indication that an asset may have suffered a loss in value (IAS 36, par.9). Independently of indicators of impairment, the International Accounting Standards require that at least once a year companies assess the recoverability of the amounts recorded (IAS 36, par.10).

An Impairment Test, therefore, is nothing but a check if such a condition exists.

As mentioned above, when the company performs the Impairment Test can use the Value in Use, it can be defined as the discounted value expected to be derived from an asset or cash generating unit (IAS 36, par 6). The methods of calculating it are in line with those usually used in accordance with criteria for estimating the economic value of any asset. During the Impairment Test the following elements must be considered (IAS 36, par 30) when determining an asset's Value in Use:

- the estimate of future cash flows that the entity expects to derive from the asset;
- expectations with regard to a possible change in the amount of these cash flows and/or the time at which they will be realized;
- the time value, represented by the current risk-free market interest rate;
- the price for bearing the uncertainty inherent in the asset;

- other factors, such as illiquidity, which market actors would consider in determining the value which the entity expects to derive from the asset.
- Estimating a Value in Use entails a process of actualization of the future cash flows generated by the asset and thus includes the following steps (IAS 36, par 31):
- estimating cash flows that will be derived from the permanent use and final disposal of the asset;
- applying an appropriate discount rate to these cash flows.

4. INFORMATION ASYMMETRY: THE RELATIONSHIP BETWEEN PREPARERS AND USERS

Agency Theory studies the agency relationship created between shareholders / investors ("principal") and managers ("agent"), where the first, due to their high number and variety in particular public companies, cannot manage directly the company and delegate such function to the second (Jensen and Meckling, 1976). Agency Theory looks at the problems that arise because there is a divergence of interests between the two parties, imperfect information on the state of the nature and the behavior of actors, and an information asymmetry between the parties. From this, it follows that the agent usually has more information than the principal as regards the task at hand. The contract between the two parties can only be incomplete and the principal is unable to control fully the agent, and any attempt to increase the degree of control involves costs (Bamberg, Spremann and Ballwieser, 1989; Bowie and Freeman, 1992; Bolton e Dewatripont, 2005; Pitt, 2011).

Acting opportunistically, parties will seek to use information asymmetries to their advantage, creating two problems: adverse selection (so-called ex ante opportunism) and moral hazard (so-called ex post opportunism). In situations of adverse selection, the agent provides incomplete or inaccurate information. Moral hazard arises from the possibility that the agent will fail to meet his commitments in the execution of the contract and from the difficulty and cost of control by the principal. In general, adverse selection or opportunism ex ante relates to the possibility that the agent will not respect his commitments under the contract, in the presence of information asymmetry, which allows him to hide or manipulate information in order to deceive the other party. The selection is adverse because, in this situation, the transactions mainly relate to individuals, goods and services of poor quality. It also defines the moral hazard, or ex post opportunism, as the misbehavior in place by a person in the performance of its contractual obligations in the presence of asymmetric information, incomplete contract and the difficulty to establish also due to non-observability of shares, if the parties have complied with the terms of the contract.

Agency Theory assumes that both parties seek to maximize their utility and rationally anticipate the effects of the agency relationship on future results. Their interests are divergent and it is very unlikely that the agent operates in the interests of the principal, and this divergence of interests needs to be reduced through monitoring tools and, above all, systems of incentives to limit the effect of such opportunistic behavior on the part of the agent.

All this implies costs, monetary and otherwise, that are defined as agency costs and include:

- costs of monitoring and incentives needed to direct the conduct of the agent;
- costs incurred by the agent in assuring the principal that he will not adopt damaging behaviors and, if appropriate, to indemnify him;
- the residual part, which is the difference between the actual behavior of the agent and the behavior that would lead to the maximization of his utility to the principal. The problem that agency theory proposes to solve, then, is, given the characteristics of the principal-agent relationship, how one structures a contract that minimizes the agency costs (Jensen e Meckling 1976; Fama and Jensen, 1983; Pratt e Zeckhauser 1985; Bolton e Dewatripont, 2005).

On the basis of what has been reported emerges, on the one hand, the contractual nature of the relationships that bind the actors involved in the enterprise and, on the other hand, the context of information asymmetry that characterizes these parties with the management team in the position of advantage with respect to financial statement users who cannot directly observe the actual achievement of corporate performance.

In the perspective that is relevant here, the Agency Theory assumes that the problems of coordinating the behavior of economic actors can not be effectively addressed by a market report or a report of authority can be solved using the agency relationship, according to which a principal engages an agent to act in its interest using the degree of latitude which is recognized. This being aware of the fact that the two parties have different information and different bargaining power.

Compared to a coordination mechanism which relies on authority, the agency relationship is characterized by a kind of decentralization, with the principal that waiver of the rights of decision and control the Agent recognizing the right to choose the behavior to take into against the Principal.

The Agency Theory moves from those beliefs to focus attention on the many contractual relationships that are established in an undertaking between the different classes of interests between them and the manager: the relationships that develop within the entity between itself and the manager of the shareholders outside the it.

According to the Agency Theory, in fact, every economic subject that comes into contact with the company binds to the latter on the basis of a contract, in which he tries to use the space as possible to maximize their marginal utility. Any contractual relationship can therefore be interpreted in the context of the relationship between a principal delegating decision-making spaces more or less extensive the Agent.

The international standard setters are questioning the adequacy of disclosure in the notes. The financial statements have become very large, but the quality of the information given is not directly proportional to the proportions. There is a risk that the financial statements becomes a formality rather than an instrument of financial communication.

The managers responsible take great care in providing information. The 2012 financial statements consist of general information and details of minor detail, hardly able to find the information needed to understand the significant management events. This behavior can be attributed to the risk that clear and transparent information we could put the Regulators in a position to understand the accounting treatment applied and, where necessary, request the modification and the restatement of the financial statements (Hoogervost, 2013).

In this context, the Impairment Test will remain a key area for international Regulators, but here are some examples:

- the European Securities and Markets Authority ("ESMA") has included the Impairment Testing of non-financial assets in its "enforcement to priorities for 2013 financial statements", focusing on the effects of financial crises and the period of low economic growth in Europe, emphasizing those aspects that could generate cash flow lower than expected (ESMA, 2013);
- the United Kingdom's Financial Reporting Council ("FRC") reports in its "2013 annual report on corporate reporting" a number of problems, in particular, shows the assumptions of a rapid filming segments of loss-making activities (FRC, 2013);
- the Australian Securities & Investments Commission ("ASIC") underlines the importance of the reasonableness of the assumption used in performing the Impairment Test (in particular expressed doubts about the significant variations between actual results and future cash flows) and the importance of a 'appropriate definition of cash-generating units (ASIC, 2013);
- The Ontario Securities Commission ("OSC") has published observation on the quality of the information provided for the Impairment Test, identifying some areas for improvement in the description of the cash-generating units, the events and circumstances that contribute to a loss of value and the key assumptions made in determining the Recoverable Amount (OSC, 2013).

5. IAS 36 AND RELATED DISCLOSURES

IAS 36 deals with the reduction in value of assets. The International Accounting Standard IAS 38 is directly related to intangible assets. In the international accounting standards Goodwill, unlike some nationals GAAP, is not subject to amortization but is subject, at least once a year, to Impairment Testing.

The Impairment Test is characterized by the comparison between the book value and the recoverable value of an asset and requires special procedures and observations; in particular, the companies have to verify the recoverability of Goodwill and intangible and tangible assets (Alciatore, 2008).

Goodwill does not represent a specific activity giving rise to cash flows or an asset that can be sold separately, but must be analyzed and evaluated by reference to the value of the CGUs[2] or group of CGUs to which it refers.

2 The cash-generating unit is the smallest group identifiable group of assets that generates cash entry

These features require, as a first step, the identification of the CGUs to which it may, in a reasonable and demonstrable allocation of Goodwill, be awarded and, subsequently, the performance of the Impairment Test by comparing the carrying value of the CGUs and their Recoverable Amounts (Alciatore, 2010).

The identification of a CGU should refer to the manner in which management manages the activities of the company and decide on the continuation or transfer of individual business activities (Amaduzzi, 2014).

IAS 36 provides a sequential order in the Impairment Test of Goodwill such that, if the necessary conditions exist, before considering the entire CGU is necessary to verify that all intangible and tangible assets that relate to some specific trigger events have not undergone an impairment, in which case their write down will be necessary before testing for impairment of Goodwill.

The observation of the Fair Value of an asset assumes the existence of a market that permits the identification of selling price and the Value in Use, however, presupposes the existence of financial plans, as to identify future cash flows that will be generated by the CGU or groups of CGUs. It is not possible to determine the selling price, because there is no basis for making a reliable estimate, since there is no active market, or even recent transactions for similar assets within the same industry, to which reference can be made.

The Value in Use of an asset must be determined based on the cash flows expected from its use, which must be discounted.

IAS 36 requires that the method of determining the Value in Use requires the use of the principles of economic coherence for a correct use of the approach based on the expected value (IAS 36, par. 20) and credibility/provability of the estimated values.

The standard does not define a specific configuration of the value to be determined, but it does define requirements for the evaluation formulas and input data.

IAS 36 requires that, in determining the Value in Use, the following are considered:

- an estimate of the future cash flows that the entity expects to arise from the CGU;
- expectations about possible variations in the amount or timing of future cash flows;
- the time value of money, represented by the current interest rate risk-free;
- quantification of the relative risk to the CGU in question;
- other factors, such as illiquidity, that market participants would reflect on future cash flows.
- In addition, IAS 36 requires that the estimate of Value in Use provides for the following:
- determine the cash flows into and outflows to be derived from the operation of the CGU and the final disposal;
- determine the appropriate discount rate to be applied to future cash flows.

In order to minimize the potential subjectivity of the estimates, IAS 36 requires that the projections of future cash flows should be based on reasonable and supportable assumptions and that greater weight should be attributed to external data.

In this view, the flow forecasts should reflect:

- management's best estimates of the economic conditions that are expected to continue to exist over the useful life of the CGU;
- the historical trend of cash flows and the analysis of the factors that have led to significant deviations from predictions in previous plans;
- the latest projections approved by management, which must not exceed a five-year time- horizon, unless a greater interval can be justified;
- a growth rate beyond the horizon of the plan that does not exceed the average long-term growth of the sector or the economies of countries where the company operates, unless a higher value can be justified;
- a measure of operating cash flows, excluding any component of a financial nature;
- any provisions in regard to liabilities relating to operations which, in the event of the sale of the CGU, should be transferred (Riccomagno, 2005).

The IAS 36 requires that the discount rate is independent of the capital structure of a company and the way in which the firm decides to finance its activities, as the future cash flows expected to arise from the CGU do not depend on the financial structure in use. The discount rate should be linked with current market assessments at the balance sheet date. Estimating a discount rate based on market conditions at the valuation date means referring to the implicit rate for similar assets in the trading market or the weighted average cost of capital of comparable companies.

In obtaining a Recoverable Amount, the Impairment Test requires a comparison of the carrying amount of the CGU or group of CGUs and the Recoverable Amount.

The performance of the Impairment Test is a complex technical exercise that requires the use of significant estimates and choices in the use of observable market parameters. In addition to the normal complexity involved in predicting future events, the context of the current crisis makes it even more difficult to determine the Recoverable Amount of the assets recorded in the financial statements.

The current context of crisis, characterized by significant volatility of the main market and considerable uncertainty about economic expectations, makes it difficult to produce forecasts that can be considered, without any uncertainty, reliable.

The information provided in this verification is particularly relevant to all interested economic operators in order to understand properly the entire process of valuation of assets (the underlying assumptions, the methodology for estimating the parameters used, etc.), as well as to have an understanding of the results of these evaluations and in particular the reasons for the write-downs.

In this context, the financial statements become ever more important. Enabling the market to understand the risk factors in determining Recoverable Amounts would allow the determination of the real effects of the economic crisis that is affecting Europe. It is also reasonable to assume that a transparent and comprehensible disclosure could reduce uncertainty among economic agents about the real recoverability of assets and liabilities. In particular, the information provided in the notes to the financial statements should consider the peculiarities of the current context and highlight the differences arising in the measurements of the previous year.

IAS 36 requires that preparers provide the basis used to determine the Recoverable Amount (i.e. Value in Use or Fair Value less costs to sell).

If preparers are using Value in Use, the notes to the financial statements should report: i) a description of each key assumptions on which management has based its cash flow projections for the period covered by the plan/most recent forecasts; ii) a description of the management approach to determining the value assigned to each key assumption; iii) the period over which management has projected cash flows based on the latest plans/forecasts; and, iv) if it is used over a period longer than five years, an explanation of why that longer period is justified (IAS 36, par. 134, lett. d), No. (i), (ii) and (iii)).

Preparers must also provide: the discount rate applied to cash flow projections and the growth rate used to extrapolate cash flow projections beyond the period of the plan/most recent forecasts; and the justification for using any growth rate higher than the long-term growth rate of production/industry/country/target market for the estimated cash flows (IAS 36, par. 134, lett. d), No. (iv) e (v).).

If preparers are using the Fair Value less costs to sell, the IAS 36 requires that they provide a description of the approach used and every assumption on which the determination of Fair Value was founded.

An additional piece of information required by the IAS 36 is an analysis of the sensitivity of the results of the Impairment Test with respect to changes in the underlying assumptions that affect the value. In this regard, companies should pay particular attention when performing this analysis and provide all the information required by the International Standards. This information is even more important given the current volatility of the financial markets and uncertainty over future economic prospects.

6. THE FINANCIAL STATEMENTS OF UTILITIES IN EUROPE: AN EMPIRICAL ANALYSIS

6.1. Methodology

As previously indicated, the subject of the study are European listed utilities. We analyzed this sector because the operators had been subjected both to the financial crisis and to significant changes in technology. Utilities are considered 'defensive' companies, because their results are relatively stable across the different phases of the economic cycle. During the years of the economic crisis, the utilities have been experiencing a decrease in the demand for electricity, the natural gas market has been shocking by shale gas (technology revolution) and, in addition, renewables have been increasing significantly. The European energy strategies have led to a rapid and significant development of renewables energies, such situation, together with the significant reduction in demand of gas and electricity, mainly

due to the economic and financial crisis, has changed the competitive scenario quickly. Nevertheless, we have to remember that the cycle of the investment in this sector has a very long term (just remember that the average useful life of a thermoelectric or nuclear plant is 20-30 years). The quickly change in market scenario and the change in technology would have been had a strong impact in the financial statements of the utilities in Europe.

A public utility is an organization that maintains the infrastructure for a public service. Public utilities are subject to forms of public control and regulation ranging from local community-based groups to state-wide government monopolies.

On the supply side, these areas are characterized in most cases by the presence of the distribution networks of the service that are duplicated only facing enormous costs. Once implanted a distribution network, the cost of providing service to an additional user is in all these industries relatively low. On the demand side, the utilities services are often characterized by being among necessities.

The term utilities can also refer to the set of services provided by these organizations consumed by public, for example electricity generation, electricity retailing, electricity supplies, natural gas supplies, water supplies, sewage works and sewage systems.

The liberalization of public services, started a dozen years ago with the aim to get over the geographical fragmentation, reduces inefficiency and encourages the exploitation of economies of scale, has profoundly changed the Italian and European energy sector.

At the date of this paper, in Europe there are 29 utilities for a total amount of shareholder's Equity Book Value of € 351 billion.

We expect a similar impact in the energy sector as in the telecommunications sector, where improvements in technology have changed the market scenario and generated significant write-downs of intangible assets.

The sample consists of 9 companies operating in the energy sector with particular focus on the utilities companies. Overall, the amount of shareholders' Equity Book Value resulting from the analyzed consolidated financial statements as at December 31, 2012 amounted to € 236 billion for an average capitalization on the stock exchange in the month of April 2013 that amounted to € 209 billion. The sample was determined based on the significance of Goodwill and recorded write-downs during the year 2012.

In this complex scenario, we expect that the notes in the financial statements of utilities companies have the information required by the international standards and additional information to inform the stakeholders of the complexity to perform an Impairment Test in this scenario; in particular, we expect a full disclosure on:

- key assumptions of the management;
- quantitative analysis and stress tests;
- determination of Recoverable Amount;
- determination of growth rates;
- discount rate

The data used as a reference in this paper were obtained from published financial statements on the websites of the companies analyzed, whereas the listings were derived from the websites of electronic markets on which the shares are traded.

6.2. Ratio between the Market Capitalization and Equity Book Value

The relationship between Market Capitalization and shareholders' Equity Book Value is a synthetic indicator of the difference between the Fair Value of the company and its shareholders' equity. A result of 100% expresses a Market Capitalization equal to the Equity Book Value; while a value less than 100% expresses a Market Capitalization lower than the Equity Book Value.

Table 1. Ratio between Market Capitalization / Equity Book Value

A	B	C	D	E	F	G	H	I
67%	109%	78%	62%	84%	129%	53%	83%	60%

Table 2. Difference between Market Capitalization (B) and Equity Book Value (A)

	A	B	C	D	E	F	G	H	I
	In Euros 000.000								
Equity Book Value (A)	7.055	25.858	34.957	62.931	36.771	55.472	2.846	1.255	9.059
Market Capitalization (B)	4.710	28.094	27.334	38.919	31.031	71.295	1.500	1.046	5.403
Difference (B-A)	*(2.345)*	*2.236*	*(7.623)*	*(24.012)*	*(5.740)*	*15.823*	*(1.346)*	*(209)*	*(3.656)*

In the event that the Market Capitalization is lower than the Equity Book Value, there is a presumption of impairment as measured by the difference between the Equity Book Value and Market Capitalization. In the analyzed sample, 78% of companies have a Market Capitalization of less than Equity Book Value. The presumption of impairment loss on the analyzed sample amounted to € 44.9 billion, the average value of the companies' amounts to € 6.4 billion. When the Market Capitalization is lower than the Equity Book Value of a company or when the Market Capitalization has recorded a strong decrease since the previous Impairment Test, the directors have to report in the notes of the financial statements a detailed analysis on these facts and circumstances that indicate an

impairment presumption. In particular, the notes should be reported how the directors have to consider these facts during the Impairment Test. The assumption is that the financial market can overstate the amount of the impairment, but it does not wrong the direction of the adjustments. It should be noted that the net assets already analyzed reflect the results of the Impairment Tests carried out in 2012.

6.3. General Information

The IAS 36 requires disclosures of the events and circumstances that led to the recognition of the impairment loss recognized during the period for an individual assets, including Goodwill, or a CGU.

During 2012, seven of the nine companies analyzed recorded write-downs. The 85% indicated the reasons for the loss of value but only 43% provided specific information on the reasons that led to the allocations.

The IAS 36 requires a description of the CGUs for each material loss recognized, disclosure of the amount of the impairment loss by reportable segment as well as a description of any changes to the aggregation of the assets of the CGUs.

As required by IAS 36, 100% of the company highlighted the allocation of Goodwill to the CGUs or group CGUs. None of the companies, however, described the allocation methodology used.

85% of companies with impairments described the CGU subject to impairment, and 71% of them showed the amount of write-downs by operating segment.

44% of the company was the subject of internal reorganization that resulted in aggregation of CGUs and the reallocation of recognized Goodwill. All companies involved in reorganization described the reasons for the redefinition, while only 25% of them showed the results of the Impairment Test in case they had not reallocated Goodwill.

6.4. Key Assumptions

IAS 36 require potentially extensive disclosures concerning key assumptions used in Value in Use calculations for each CGU for which the carrying amount of the Goodwill or intangible assets with indefinite useful lives allocated to that unit is significant. In addition, it requires a description of each key assumptions on which management has based its cash flows projections for the period covered by the most recent budgets/forecasts. Key assumptions are those to which the unit's Recoverable Amount is most sensitive.

The entity has to provide a description of management's approach to determining the values assigned to each key assumptions. In particular, this disclosure should state whether the values used reflect past experience or, if appropriate, are consistent with external sources of information and why they differ from past experience or external sources of information, if applicable.

The Standard requires similar disclosure concerning key assumptions used in Fair Value.

78% of the companies did not indicate the consistency of the assumptions used in the development of medium and long-term plans with the historical data. An additional important information that 44% of the sample reported in the notes to the financial statements is the connection between the plans used by the directors and the market consensus. Finally, only 56% of the companies indicated the key assumptions used to determine the Recoverable Amount.

6.5. Utilized Parameters in the Discounted Cash Flows

IAS 36 requires the disclosure of the basis on which the Recoverable Amount has been determined. In particular, the IAS 36 requires disclosing how the entity determines the Value in Use or the Fair Value.

All examined companies reported the method used to determine the Recoverable Amounts (i.e. 100% of the companies used the Value in Use, while 22% of the Fair Value).

Less comforted are the results obtained about the specific nature of the information reported on the determination of the Recoverable Amount, as only 22% exposed detailed information. This information is crucial to understand the Impairment Test performed, because the user should obtain a clear explanation of the risks and uncertainties in the process of estimating future cash flows. The lack of this information does not allow the users to analyze the choices made by directors.

6.6. Duration of the Explicit Cash Flows

IAS 36 requires the use of explicit flow forecasts for a period of 3 to 5 years, longer periods should be supporting by precise reasons.

44% of the companies used a specific period longer than 5 years; only 25% justifies the choice of using a longer period.

When directors use a period longer than 5 years, they increase the uncertainties of the Impairment Test; in particular, the Impairment Test is really challenging if the growth rates used exceed the levels of growth rates of the market/sector. The lack of this information does not allow the users to assess the appropriateness of the choices made by prepares.

6.7. Discounted Rate

The Standard requires disclosing the discount rate applied to the cash flow projection for each CGU with allocated a significant portion of Goodwill.

The cost of equity is often determined by using the Capital Asset Pricing Model ("CAPM"). Those who use this model should identify some key parameters as risk free, market premium and beta. Therefore, it is import to disclose this information, because the users can understand the parameters used by the Entity. An additional important information regard the parameters used the previous year, so that the users can evaluate the changing effect the Impairment Test during the time.

All companies reported the discount rate used, but 44% of them did not report the discount rate used for the individual cash generating units.

78% of companies used a discount rate after tax. The range of observed values lies between 4.8% and 17%, while the range of the pre-tax discount rate lies between 5.88% and 15.8%.

None of the companies in the sample reported the components of the discount rate used. Only 56% of companies reported the discount rates of the previous year.

6.8. Growth Rate of the Terminal Value

IAS 36 requires bringing the growth rate used in determining the terminal value. These rates may be assumed to be constant or declining and must not be higher than the growth rate for the products, sectors and countries in which the entity. Naturally, a zero or negative growth rate may be applied. So is also required justification of the use of growth rates

78% of companies reported growth rate following explicit flows used to determine the terminal value. The parameters used by the companies in the sample are:

- 33% using a growth rate of 0%;
- 33% using growth rates between 0 and 2%;
- 33% using growth rates exceeding 2%.
- 66% of firms with growth rates did not report the reasons.

Only 22% of the sample showed the growth rate used in the previous year.

In many cases, the main part of the Recoverable Amount is determined by the terminal value. The use of the growth rate more than zero should be explained accurately. In addition, the growth rate should be compared with the growth rate of the market/sector. The lack of the explanation to use a positive growth rate does not allow the users to evaluate the estimate performed by directors.

6.9. Sensitivity analysis

The IAS 36 requires disclosing the sensitivity analysis, if a reasonably possible change in a key assumption on which management has based its determination of the CGU Recoverable Amount would cause the carrying amount of the CGU to exceed its Recoverable Amount.

The sensitivity analysis of the plan relates to the assumption that alternatives are non-considered expressive than expected average conditions, but which are reasonable. These assumptions can be defined "sensitive" or "significant"; in particular:

- assumptions for which it is reasonable to expect a change that can significantly affect the results of the Impairment Test (sensitive assumption);
- assumptions concerning future conditions that are expected to be significantly different from those current and for which uncertainty is high (significant assumption).

Only 33% of the analyzed cases contained quantitative information about the possible effects on the results of the Impairment Tests in the case of possible changes of the key assumptions in order to mitigate this lack 45% of companies showed qualitative analyzes.

Energy markets are difficult to predict at the best of times and the natural gas supply shock is just one among many disruptive trends that utilities have to consider, including new sources of renewable energy, distributed generation, regulatory shifts and rising energy efficiency, coupled with declining consumer use. The results obtained show a significant lack of information, because in this uncertain market environment, prepares defined the long-term predictions, but in the most cases analyzed the sensitive assumption, significant assumption and related sensitivities analysis have not been disclosed. In this market environment is very important to inform the users of the financial statements about the results that you might have in the case that the assumptions used by prepares should be realized in a different way than estimated.

CONCLUSION

The sample is composed of nine companies, two only of which have a ratio of Market Capitalization and shareholders' Equity Book Value of over 100%. As previously reported, in the case where the ratio is less than 100%, there is a market presumption of impairment as measured by the difference between the net book value and Market Capitalization. In this situation, it is reasonable to expect a complete information about how the companies as performed the Impairment Test that allowed their managements to overcome the market presumption of write down. However, the results do not show a full compliance with the disclosure requirements in IAS 36 and, more generally, the provided information does not allow a full assessment of the performed tests as well as their riskiness.

The analysis shows that the disclosures are not always in compliance with IAS 36; in particular, there is a reluctance of the directors in providing quantitative information about the performed sensitivity analysis on sensitive data (as required by IAS 36).

The omission of such information do not allows the reader to assess the effects on the recoverability of the value in case the forecasts should not occur or should occur only in part. In addition, the quantitative analyzes were deficient of information such as the reasons for the write-downs, periods explicit or used comparative information.

In a market environment like the current one, it would be desirable to have understandable and transparent information (Chen *et al.,* 2008 and Costi 1998).

As indicated in the Agency Theory, there is a divergence of interests between prepares and users of financial statements, so that prepares did not provide a full disclosure on assumptions used. So prepares use information asymmetries to their advantage and the result is an incomplete disclosure. As evidenced by the results of the analysis in many cases there are not information needed by the users to evaluate the choices made by prepares. Only full disclosure in the financial statements would allow users and regulators an assessments of the estimates made by prepares.

The enforcement activities performed at European Level "Activity Report of the IFRS Enforcement activities in Europe 2012" confirm the results obtained by our analysis. ESMA highlights that IFRS enforcement activities at member States' level have increased in 2012 compared to the previous year and European enforces reviewed more than 2,000 interim or annual IFRS financial statements and took around 500 enforcement actions. The conclusion of the enforcement activities shows that overall the quality of the IFRS financial statements continued to improve as a result of the significant experience gained by the prepares with

IFRS application since the first time application in 2005. Nevertheless, it was noted that there is still room for improvement in the quality of financial statements in certain areas. Examples of areas requiring additional effort from issuers in order to comply with IFRS include: application of the classification criteria for assets held for sale, determination of the discount rate for the calculation of defined benefit obligations, classification and measurement of financial instruments, assessment of Goodwill impairment, distinction between a change in an accounting policy and an accounting estimate and disclosures about the risks and uncertainties or judgments and estimates used in preparation of IFRS financial statements.

It will be interesting to analyze the next financial statements to see if the enforcements of European regulators have led the directors of the entities to improve the disclosure on the Impairment Tests.

REFERENCES:

1. AA. VV. (2014), Principi contabili internazionali 2014, Il Sole 24 Ore.
2. Abate E., Rossi R., Virgilio A. (2010), IAS/IFRS US GAAP – Principi contabili italiani. Confronto e differenze – vol.. 3, EGEA.
3. Alciatore M. (1998), Asset write-downs: a decade of research, Journal of accounting literature, No. 17, pp. 1-39.
4. Alciatore M., Easton P., Spear N. (2000), Accounting for the impairment of long-lived assets: evidence from petroleum industry, Journal of accounting and economics, 29:2, pp. 151-172
5. Amaduzzi A. (2014), Calculating "Value in Use" in accordance with IAS 36: linking accounting and finance, Giuffré Editore, Milan.
6. Anderson J. (2008), Wall Street's fears on Lehman Bros. Batter markets, The New York Times, 9 settembre 2008.
7. Azzali S. (2002), Il bilancio consolidato secondo i principi contabili internazionali, Il Sole 24 ore, Milan.
8. Bamberg G., Spremann K., Ballwieser W. (1989), Agency Theory, information and Incentives, Springer, e-book.
9. Bauer R. (2007), Gli IAS/IFRS in bilancio, Wolters Kluwer Italia, Milan.
10. Bianchi G. (2008), Il bilancio delle società: principi di redazione e guida alla lettura, Wolters Kluwer Italia.
11. Bolton P., Dewatripont M. (2005), Contract Theory, MA, MIT Press, Cambridge.
12. Bowie N. E., Freeman E. (1992), Ethics and Agency Theory, Oxford University press.
13. Cavazzoni C. (2007), Capacità informativa del bilancio IAS/IFRS. Fondamenti teorici e profili operativi, Giappichelli editore, Turin.
14. Chen C., Kohlbeck M.J., Warfield T. (2008), Timeliness of impairment recognition: evidence from initial adoption of SFAS 142, *Advances in accounting,* 24, 1, pp. 72-81.
15. Costi R (1998), L'informazione societaria e i mercati regolamentati, in Le Società, 17: 8 pp. 878 – 880.
16. Dezzani F., Biancone P.P., Busso D. (2010), IAS/IFRS, IPSOA, Milan.
17. EFRAG (2013), Getting a Better Framework The Asset/Liability approach, September 2013 on http://www.efrag.org/files/Conceptual%20Framework%202013/130911_CF_Bulletin_Asset-Liability_-_final.pdf.
18. ESMA (2013), ESMA Report - European enforcers review of impairment of Goodwill and other intangible assets in the IFRS financial statements, January 2013.
19. Fama E.F., Jensen M.C. (1983), Agency Problems and Residual Claims, Journal of Law & Economics, Vol. 26, pp. 301-325.
20. Fama E.F. (1970), Efficient capital markets: a review of theory and empirical work, Journal of Finance, Vol. 25, No. 2, pp. 383-417.
21. Forbes Pitt K. (2011), The assumption of Agency Theory, Taylor and Francis.
22. FRC – Financial Reporting Council (2013), Corporate Reporting Review - Annual Report 2013, October 2013.
23. Gilson and Kraakman (1984), The mechanisms of market efficiency, Virginia Law Review, v. I, 70 Va. L. Rev. 549.
24. Godfrey J.m., Chalmers k. (2007), Globalisation of Accounting Standards, Edward Elgar Publishing
25. Herz B. (2013), Accounting Changes, Chronicles of Convergence, Crisis, and Complexity in Financial Reporting, AICPA.
26. Hoogervost H. (2013), Breaking the boilerplate, IFRS Foundation Conference 27 Giugno 2013, Amsterdam.
27. Iori M. (2013), Principi contabili nazionali e internazionali, Il Sole 24 Ore, Milan.
28. Jensen, M., Meckling W.H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics 3 (4): 305-360.
29. OIC (2005), Guida operativa per la transizione ai principi contabili internazionali (IASIFRS) on http://www.fondazioneoic.eu/wp-content/uploads/downloads/2010/11/2005-10_Guida-operativa-11.pdf.
30. OIC (2007), Guida operativa sulla informativa di bilancio prevista per i soggetti che adottano i principi contabili internazionali, Guida 2 aprile 2007.
31. OIC (2008), Guida operativa: "Aspetti applicativi IAS/IFRS", on http://www.fondazioneoic.eu/wp-content/uploads/downloads/2010/11/2008-06-25_-OIC_Guida-3.pdf.
32. Perrone (2003), Informazione al mercato e tutele dell'investitore, Giuffrè editore, Milan.
33. Pozzoli M., Roscini Vitali F. (2007), Manuale operativo IAS/IFRS processo di transizione, criteri di valutazione, schemi, prospetti ed esempi, Il Sole 24 ore, Milan.
34. Pratt F.W., Seckhauser R.S., Principals and Agents, the structure of business, Boston, Harvard Business school press.
35. Riccomagno F. (2005), IAS/IFRS: modello di bilancio, Il Sole 24 ore, Milan.
36. Saita M., Saracino P. (2012), Economia Aziendale, Giuffré Editore, Milan.
37. Thornton G. (2011), Principles-based revenue recognition. Executory contracts and the asset/liability approach, on http://www.grantthornton.com/staticfiles/GTCom/Audit/Assurancepublications/Principles-based%20revenue%20recognition/principles-based%20rev%20rec_white%20paper%20-%20FINAL.pdf.
38. White B. (2008), Lehman sees $3.9 billion loss and plans to shed assets, The New York Times, 10 settembre 2008.
39. Zucca L.J., Campbell D.R. (1992), A closer look at discretionary writedowns of impairment assets, Accounting Horizons, 6:3, pp.30-41.