"IFRS 3 (R) REQUIRED DISCLOSURES ON GOODWILL AND INTANGIBLE ASSETS: AN EMPIRICAL ANALYSIS ON THE LEVEL OF COMPLIANCE OF ITALIAN LISTED COMPANIES ON REQUIRED DISCLOSURES"

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Introduction

In the continuous evolution of the capital markets, which brings competition to a global level, the intangible assets - human resource, intellectual property, relational capital, organizational know-how – have become the key elements for the survival and development of companies. Nowadays, in evaluating a company, investors, analysts, and in general, market participants, are giving more and more importance to the value of the intangible assets owned. This is the reason why their accounting treatment has never been so relevant.

Indeed, the accounting treatment of the intangible assets is considered one of the main accounting challenges of the knowledge economy. Even if, the standard setters are trying to keep up with their spread, updating the existing standards and introducing new ones, it seems that their intervention is always late compared with the relevance acquired meantime by the intangibles.

Given that the companies’ success depends increasingly by their intangible assets, they have to decide if to internally develop these assets or to buy them. To internally develop the intangible assets may be a time consuming and expensive process, sometimes even with uncertain results. So, an alternative and increasingly widespread practice is the acquisition of businesses that had already developed them. However, the increase in the business combinations gave rise to an additional conceptual and accounting issue: the recognition of goodwill. The opinions about goodwill are contrasting. Some scholars are considering it a mere difference between the purchase price and the value of the net assets acquired. Others, and among them the standard setters, are seeing the goodwill as additional intangible resources acquired – synergies, skilled workforce, business processes and routine - for which the individual accounting recognition is not allowed.

Even if, usually, developing the intangible assets internally or acquiring them through a business combination conduct to the same result, the accounting treatment of these two alternatives may be different. Indeed, while the IAS 38 does not allow to the companies to recognize many internally generated intangible assets, the IFRS 3 is providing for the compulsory recognition of any separately identifiable intangible assets during a business combination, even if those assets were not previously recognized in the acquiree’s balance sheet. This different accounting treatment of equal intangible assets is considered unfair because of expensing most of the internally generated intangible assets and capitalizing the same assets if acquired.
The consequence of this different accounting treatment is that most of the intangible assets present on the companies’ balance sheets, nowadays, are the result of an acquisition. So, the aim of this thesis is to analyse the level of compliance of the Italian listed companies with the requirements provided by the IFRS 3 (R) for the initial recognition of the intangible assets and goodwill acquired through a business combination.

The thesis is structured as follows: chapter one provides a general view of the literature about the intangible assets, and the general accounting treatment under IAS/IFRS and US GAAP; chapter two introduces the accounting treatment of intangible assets and goodwill under IFRS 3 (R), which regulate the business combination, and expose the principal researches on the relevance of the recognition of intangible assets and the qualitative description of goodwill for the market participants; chapter three illustrates the empirical analysis performed on the level of compliance of the Italian listed companies with the main requirements of IFRS 3 (R) on intangible assets and goodwill.
Chapter 1: Intangible Assets

Already from the last decade of the past century, it was recognized the relevance of intangible assets. Authors and researchers noticed that the source of value was shifting from production plants to certain categories of intangible resources, as technological competencies and customer relations. In this way, the intangible assets began to substitute the tangible ones as value drivers during the so-called “new economy”. That trend is continuing nowadays. It is important to notice that this is true not only for the high-tech, Internet, or pharmaceutical businesses but also for the consumer product companies. As Gu and Lev underline “corporate value and growth are increasingly driven by intangible assets, whereas physical capital (like factories, machines, or inventory) is just an enabler—a commodity—equally available to all competitors and hence a marginal creator of value and competitive advantage”\textsuperscript{1}. This is confirmed by the study on Intangible Asset Market Value, conducted by Ocean Tomo LLC in 2017. It was analysed the amount of tangible and intangible assets that were composing the market value of the companies belonging to the index S&P 500. As it is possible to see from figure 1, the value of the intangibles increased significantly since 1975, and arrived to represented 87% of the market value of those companies in 2015.

During this evolution, the traditional accounting systems became unable to achieve their main purpose: to represent the key value sources of companies to external and internal stakeholders. In fact, the traditional accounting systems were mainly intended to represent the value of plants and equipment, then intellectual properties. In this way, most of the intangible assets of companies were still not represented in the financial statements. But as Vipal Monga pointed

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Annual Study of Intangible Asset Market Value from Ocean Tomo LLC, by Ocean Tomo LLC (2017)}
\end{figure}

\textsuperscript{1} Lev, B., and Gu, F., “The End of Accounting and The Path Forward for Investors and Managers”, Wiley, pp 82, (2016)
out: “How do you attach a price tag to something you can’t see or touch?”2. This is one of the main challenge regarding the intangible assets, but not the only one.

1.1 Definition and characteristics of intangible assets

Indeed, it is not even possible to provide a shared definition of intangible assets. According to Kristandl and Bontis, the researches on intangible assets suffer from lack of common terminology3. Any author and researcher develops his own definition and tries to establish his own terminology. In literature, it is possible to find many terms used in relation to intangible assets: intellectual property, intellectual capital, intellectual assets, knowledge capital, knowledge-based assets. Some authors are using them as synonymous, while others are using them to characterize a particular area of intangibles. In this thesis, the terms will be used as synonymous, and specific distinctions will be explained.

As already underlined, many authors attempt to give an own definition of intangibles. Roos et al, define the intellectual capital as “the sum of the hidden assets of the company not fully captured on the balance sheet, and thus include both what is in the heads of organizational members, and what is left in the company when they leave.”4 Sveiby wrote that the intangible assets are “invisible assets that include employee competences, internal structure and external structure”5. Blair and Wallman gave a broad definition, stating that the intangible assets are “nonphysical factors that contribute to, or are used in, the production of goods or the provision of services or that are expected to generate future productive benefits to the individuals or firms that control their use.”6 Lev defined the intangible asset as “a claim to future benefits that does not have a physical or financial (a stock or a bond) embodiment.”7 Edvinsson and Malone described intangible assets as “those that have no physical existence but are still of value to the company”8. Some authors and researchers, among them also Edvinsson and Malone, state that

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3 Kristandl, G., and Bontis, N., “Constructing a definition for intangibles using the resource based view of the firm”, Management Decision, Vol.45 No.9, 2007


the value of the intellectual capital of a company could be defined also according to the following equation:

\[ \text{Intellectual capital} = \text{Market Value} - \text{Book Value}. \]

Anyway, the last definition does not meet the approbation of most among the experts in intangible assets. Indeed, many academics sustain that the market-to-book relation is affected, apart from intangible assets, also by the following factors:

- the accounting conservatism, as the undervaluation of tangible and financial assets;
- the presence of intangible liabilities that are not reflected in the shareholder’ equity;
- the market value which sometimes does not represent an unbiased estimate of the value of a company.\(^9\)

The common idea, behind any definition recalled previously, is that what actually distinguishes a tangible asset from an intangible one is its physical substance. Anyway, according to Stephan Grüber, two more issues must be considered\(^10\). The first one is that also the financial resources are characterized as having no substance, but are not considered intangible assets. The second issue consists in the fact that many times for an intangible asset it is necessary a tangible one to realize its value. An example may be a software and the disk that carries the program: the program is the intangible element, while the disk is the tangible one. So, academics classify the assets that have the tangible component as well as the intangible one according to four parameters: the function of the tangible component, the economic interest associated with the item, the relative values of the components, and the reproduction of the respective item.

Passing at the economic characteristics of the intangible assets, the disagreement between authors and researchers persists. Indeed, they identified different economic characteristics of intangibles which represent the value that these assets bring to the companies.

According to one of the main researcher and author in the field of the intangible assets, Baruch Lev, the “intangibles, like physical and financial assets, are subject to the fundamental law of balancing benefits and cost”\(^11\). He sustains that the intangible assets, given their characteristics, have two main value drivers which are the scalability and network effects, and three main cost drivers which are partial excludability, inherent risk, and non-tradability, as we can see from the figure.

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Reilly and Schweihs identified two different economic characteristics of the intangible assets. The first one is that an intangible asset must generate economic benefits for the owner, which can be measured as revenues increase or costs decrease. The second characteristic is that the intangible should enhance the value of other assets (tangible and intangible) with which it is associated.

1.2 Classification of intangible assets

Given the different definitions and different economic attributes of intangible assets identified by researchers and authors, it was not possible to get either a common classification. The different classifications identified are based on different criteria of distinction. Anyway, it is possible to identify two leading approaches: the legal classification and the economic classification schemes.

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1.2.1 Legal classification of intangibles

In the legal classification the focus is on the legal properties of the intangible assets, in particular the possibility of enforcement of the rights over them. According to this criterion three categories of intangibles were identified by the authors Von Keitz, Dawo, Hepers, and Velte: legal rights, economic values, and economic advantages\textsuperscript{14}.

The first category, of the legal property right or intellectual property rights, consist of legally or contractually enforceable rights. The economic benefits deriving from the intangible asset are legally or contractually protected, and this means that it is possible to restrict the access to the benefits to others. So, the origin of the intangibles in this context comes from law, from a different act of public authority or from a contractual arrangement. Examples of intangibles included in this class are: industrial property rights, concessions, trademarks, copyrights, registered design, rights to use and exploit certain assets\textsuperscript{15}. The protection of this category of assets is easier, if compared with the next two classes, because it is simpler to prove their existence.

The second category, economic values, includes those intangible assets which are possible to be separated from the remaining entity and to be measured individually. Anyway, even if these assets arise from legal and economic transactions, the difference with the first category consists in the fact that they are not protected by the law or by contractual agreements. This means that the benefits arising from these assets cannot be effectively protected by the owners. The intangible assets included in this category are: non-protected invention, technical know-how, trade secrets, certain software applications\textsuperscript{16}.

The characteristics of the last category, economic advantages, are that they are not separately identifiable, cannot be measured individually and are not subject to a legal or contractual arrangement. Their benefits usually arise at the level of the entity as a whole. Examples of the economic advantages are: expenditures for research and development, expenditures for marketing and advertisement, start-up costs, training expenses, management philosophy, corporate culture, non-contractual relationship with customers and suppliers\textsuperscript{17}. This category is posing more challenges on the evaluation and on the external communication of the resources.

of the company. In the next figure, it is illustrated a scheme of this legal classification of the intangible assets.

![Intangible Values](image)

**Figure 3:** *Intangible Values in Financial Accounting and Reporting: An Analysis from the Perspective of Financial Analysts*, by S. Gruber, (2014)

### 1.2.2 Economic classification of intangible assets

The economic classification scheme focuses on the economic characteristics of the intangible assets. In this field it is possible to find numerous frameworks, identified by many authors and researchers, which are based on the function of the intangible assets in the companies or on their economic nature, but it is not the aim of this thesis to analyse them individually. Anyway, to have a general idea about them, it is possible to follow the recapitulation made by Stephan Grüber. He recognized that “three common themes dominate the different classification schemes: Human Capital or Employee Competence, External or Relational Capital as well as Organizational Capital”\(^\text{18}\).

According to the different researches and classification the *human capital* or *employee competences* are among the most discussed intangible assets for the difficulty to identify and evaluate them. Many are the definitions provided for the *human capital*. Edvinsson and Malone define it as the “*combined knowledge, skill, innovativeness, and ability of the company’s individual employees to meet the task at hand*”\(^\text{19}\). Sveiby, instead, gives a definition of the *employee competence*, which, according to him consist in “the capacity to act in a variety of...”

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situations to create both tangible and intangible assets”\textsuperscript{20}. Alama Salazar states that “the intangible elements that human capital includes refer, basically, to the knowledge acquired by a person, as well as other individual qualities such as loyalty, versatility or flexibility, which determine the productivity and value of the contribution of the individual to the company”\textsuperscript{21}. Even if the wording of these definitions is different, the underlying meaning is quite similar and refer to the knowledge, skills, abilities, previous experience, creativity, innovation capacity, flexibility, loyalty of the employees. Moreover, the management quality or experience must be considered to have a full understanding of the human capital of a company.

The relation capital or the external capital focuses on the relationships the company entertains with its different stakeholders. During the Euroforum, in 1998, the relational capital has been defined as “the value of the relations that an organization maintains with the different agents of its environment”\textsuperscript{22}. One more definition is provided by Abhayawansa, who defines the external capital as “all resources linked to a firm’s relationship with external stakeholder including suppliers, customers, partners, government and the community plus the perceptions held about the firm by these stakeholders that can benefit the firm”\textsuperscript{23}. The relationships that are part of the relational capital are the ones with: customers, supplier, allies and partners, shareholders, debt providers, public administration, trade unions and social movements, community and mass media. De Castro underlines the risk of the relation capital, by stressing that it is a non-exclusive property of the firm, given that there are at least two parties involved\textsuperscript{24}. This aspect makes more troublesome and uncertain the managing and the control of this asset.

The last class identified by Grüber is the organizational capital. Gordon Petrash defined it as “that knowledge that has been captured/institutionalized within the structure, processes, and culture of an organization”\textsuperscript{25}. According to Garcia-Meca, the organizational capital is “the ability to operate in a coordinated manner using the resources available to a company”\textsuperscript{26}. The organizational capital is important because it describes the organizational capabilities that allow to the firms to put in action all the functions (assemble, integrate, combine and deploy


resources) necessary to meet its objectives. As Sveiby underlines, these capabilities can be purchased or can be internally generated. The important aspect is that even if created internally by the employees, these capabilities will not leave the entity when the employees will leave.

1.2.3 “Identifiable” and “unidentifiable” intangible assets

The legal and the economic classification illustrated above of the intangible assets does not correspond to the intangible assets that may be accounted for according to the standard setters (IASB, FASB). Indeed, they are requiring for an additional classification which distinguish among the intangible assets that may be recognized and the ones that cannot. This classification is between the “identifiable” and “unidentifiable” intangible assets. To be “identifiable”, the intangible should be separable from the company (it should be possible to sell it, transfer or license), or it must arise from contractual or legal rights. This classification is taking into consideration only the first two categories of the legal classification: the legal rights and the economic values. The remaining intangibles, which do not own the requisite of “separability”, are classified under the goodwill. According to the standards the unidentifiable intangible assets are not recognized in the financial statement of a company when they are internally generated, and are recorded under the goodwill only when a transaction took place. The importance of the goodwill can be deducted by the significative percentage of the price, in a business combination, that it usually represents. But what is the goodwill?

The International Glossary of Business Valuation defines the goodwill as “that intangible assets arising as a result of name, reputation, costumers, loyalty, location, products and similar factors not separately identified”. All these elements are characterizing any business, but the difficulty consist in the impossibility to find an effective way to recognize them separately, or even more complicated, to value them individually. So, the goodwill is a group of assets, that contributes to the value of a business enterprise, but is not identifiable or separable at the measurement day.

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1.3 Accounting Treatment of Intangible Assets

After having analysed the general characteristics of intangible assets, it is important to understand their accounting treatment. The two accounting systems considered in this thesis will be the International Financial Reporting Standards (IFRS) and the US Generally Accepted Accounting Principles (US GAAP). The importance of the first one (IFRS) is related to its spread around the world, and in particular in the European Union. The second one (US GAAP), used by the USA publicly traded companies, is important for the dimension of the capital market to which it is applicable.

1.3.1 International Financial Reporting Standards

From 2002, with the Regulation (EC) No 1606/2002, it became compulsory for all the European listed companies to follow a single set of international accounting standards in preparing their consolidated financial statements. The standards are known as IAS and IFRS. The IAS (International Accounting Standards) were issued between the 1973 and 2001 by the IASC (International Accounting Standard Committee), while the IFRS (International Financial Reporting Standards) are issued since 2001 by the IASB (International Accounting Standards Board). The IASB is an independent body based in London, as it was the IASC before. It was decided, with the establishment of the IASB in 2001, to adopt all the IAS, with the condition that when the principles established in IAS and IFRS are contradictory, the older ones (IAS) will be superseded. Any standards issued by the IASB, before to come into force, must be endorsed with a specific process under the responsibility of European Commission.

The main standard that is introducing the intangible assets and is explaining their accounting treatment is the International Accounting Standard 38 (IAS 38), which in any case must be integrated and applied in compliance with other standards, as the IFRS 3, on business combinations, IFRS 13 on fair value measurement, and IAS 36, on impairment of assets.

The IAS 38 was issued for the first time in September 1998, in substitution of IAS 9, that was treating only about Research and Development Costs. The first version of the IAS 38 provided the recognition criteria, the measurement bases, and the disclosure requirements for intangible assets. But the standard applied today is based on the revised version of the IAS 38, issued in

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29 International Accounting Standard 38, (2008)
2004. The revised version of the standard was part of a project on accounting for business combinations. The aim of the IASB was to “improve the quality of, and seek international convergence on, the accounting for business combinations and the subsequent accounting for goodwill and intangible assets acquired in business combinations”\(^\text{31}\). So, in revising the IAS 38 only those aspects that were related to business combinations were changed, the rest of the standard was maintained unchanged. The main changes regarded the notion of “identifiability” of the intangible assets, the useful life and the amortization (passing from a maximum economic life of the intangibles of twenty years established in 1998, to the possibility to have intangible assets with an indefinite useful life in 2004), and the accounting treatment of in-process research and development projects acquired into a business combination\(^\text{32}\).

Successively, also the last version of the standard has had some amendments regarding:
- the advertisement and promotional activities, and units of production method of amortization in May 2008;
- the measurement of intangible assets in business combinations in April 2009;
- the proportionate restatement of accumulated depreciation under the revaluation method in December 2013;
- the clarification of acceptable methods of depreciation and amortization in May 2014\(^\text{33}\).

Current IAS 38

The IAS 38 governs the accounting treatment of the intangible assets, in particular, it prescribes the recognition of the intangibles when some specific criteria are met, the measurement of their carrying amount, as well as the necessarily related disclosures.

Before any specific requirement, the standard defines its scope of application. The IAS 38 is not applicable to:
- the financial assets (IAS 32);
- the recognition and measurement of exploration and evaluation assets (IFRS 6);
- the expenditures on the development and extraction of minerals, oil, natural gas, and similar non-regenerative resources;
- the intangible assets that are within the scope of application of another Standard as deferred tax assets (IAS 12); leases that are treated under IAS 17; assets deriving from employee benefits (IAS 19); goodwill arising from a business combination (IFRS 3); intangible assets held by an entity for sale (IAS 2, IAS 11 and IFRS 5); and deferred

\(^{31}\) International Accounting Standard 38, para. IN2, (2008)
\(^{32}\) International Accounting Standard 38, para. IN4, (2008)
acquisition costs, and intangible assets, arising from an insurer’s contractual rights under insurance contracts (IFRS 4)\textsuperscript{34}.

The standard, after selecting some keywords used in its text, specifies the meaning that it should be given. Here the standard gives the first definition of the intangible asset: \textit{“An intangible asset is an identifiable non-monetary asset without physical substance”}\textsuperscript{35}.

The expressions “intangible item” or “intangible resource” used sometimes by the standard shall not be confused with “intangible asset”. According to Grüber the “intangible assets” are a subset of the “intangible items”, this means that not all intangible items, in which companies invest, are intangible assets\textsuperscript{36}. As the standard underlines \textit{“if an item does not meet the definition of an intangible asset, expenditure to acquire it or generate it internally, is recognised as an expense when it is incurred. However, if the item is acquired in a business combination, it forms part of the goodwill recognised at the acquisition date”}\textsuperscript{37}. The attributes that an intangible resource must have in order to be possible for the entity to classify it as an intangible asset are:

- identifiability,
- control over the resource,
- the existence of future economic benefits.

\textbf{Identifiability}

The identifiability is considered as the prevailing criterion for the intangible assets\textsuperscript{38}. To be identifiable an intangible asset must:

- be separable (it should be possible to separate or divide it from the entity and sell, transfer, license, rent or exchange it, either individually or together with a related contract) without considering whether the entity intends to do so; or
- derive from contractual or other legal rights, regardless of whether those rights can be transferred or separate from the entity or from other rights and obligations\textsuperscript{39}.

The standard requires to the intangible assets to be identifiable, in order to be possible to distinguish them from the goodwill. The aim of the IASB is to make sure that all the identifiable assets that are detected during a business combination are recognized separately from goodwill.

\textsuperscript{34} International Accounting Standard 38, para. 2-3, (2008)
\textsuperscript{35} International Accounting Standard 38, para. 8, (2008)
\textsuperscript{37} International Accounting Standard 38, para. 10, (2008)
\textsuperscript{39} International Accounting Standard 38, para. 12, (2008)
This because the goodwill is considered to provide little transparency to investors and to other financial statement users\textsuperscript{40}.

The examples of separate classes of intangible assets, provided by the standard, are:

a) brand names;
b) mastheads and publishing titles;
c) computer software;
d) licences and franchises;
e) copyrights, patents and other industrial property rights, service and operating rights;
f) recipes, formulae, models, designs and prototypes; and
g) intangible assets under development\textsuperscript{41}.

**Control over the resource**

To satisfy the definition of “intangible asset”, the resource must be controlled by the entity. According to IAS 38 the entity controls the resource when:

- has the power to obtain the future economic benefits flowing from that resource, and
- can prevent the access of others to those benefits\textsuperscript{42}.

Certainly, the control over a resource exists if the entity has legal rights on it. The legal rights are acquired when the company registers patents, copyrights, etc. Anyway, the legal rights are not “necessary condition for control because an entity may be able to control the future economic benefits in some other way”\textsuperscript{43}. For example, the entity has a de facto control when introducing the duty of employees to maintain confidentiality or the restriction to transfer knowledge\textsuperscript{44}. On contrary, for the intangible resources as technical knowledge of staff, customer loyalty, long-term training benefits, will be difficult to meet the criteria of control over the economic benefits arising from them\textsuperscript{45}. For the entity, it would be impossible to have a full control over these items. Indeed, it may happen that the company spends a considerable amount of money in training its employees, but cannot afterwards, prevent them from changing employer.


\textsuperscript{41} International Accounting Standard 38, para. 119, (2008)

\textsuperscript{42} International Accounting Standard 38, para. 13, (2008)

\textsuperscript{43} International Accounting Standard 38, para. 13, (2008)


Future economic benefits

Generate future economic benefits is the criterion required to a resource to be considered an asset, tangible or intangible. In the case of the intangible asset, the standard is requiring that the future economic benefits arising from the intangibles must consist in revenues from the sale of products or services, costs reduction, or other benefits flowing to the entity from that asset\textsuperscript{46}. An example of other benefits flowing from an intangible consists in considering a secret formula (protected by the company), which reduces competition, allowing to the entity to spend less in marketing and advertisement\textsuperscript{47}.

Recognition and Measurement

Meeting the definition of intangible asset is not sufficient to recognize the intangible resources on the financial statement. The standard requires to be satisfied also the recognition criterion. The recognition criterion is satisfied when both of the following conditions are respected:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be measured reliably\textsuperscript{48}.

These two requirements are also known as the probability-criterion and the reliability-criterion\textsuperscript{49}. The judgement on the fulfilment of the probability-criterion, according to the standard, must be based on reasonable and supportable assumption, made by the management, about the economic condition that will exist during the life of the intangible asset\textsuperscript{50}. The reliability-criterion requests that the cost of the asset must be measured reliably: it should be possible to identify each component of the total cost. This last criterion should be assessed according to the different circumstances in which the company get the asset\textsuperscript{51}.

The different circumstances, according to IAS 38, in which a company can obtain an intangible asset are:

- by separate purchase,
- as part of a business combination,

\textsuperscript{46} International Accounting Standard 38, para. 17, (2008)
\textsuperscript{48} International Accounting Standard 38, para. 21, (2008)
\textsuperscript{50} International Accounting Standard 38, para. 22, (2008)
- by a government grant,
- by exchange of assets,
- by self-creation (internal generation).

The initial recognition of the externally acquired intangible assets is usually at cost, with some exception for the government grants which must follow also the IAS 20. The cost at which the intangibles are recognized initially on the financial statement represents also their fair value at the acquisition day. For the internally generated intangible assets is provided the initial recognition at cost too, but the IAS 38 requires additional recognition criteria to be met.

*Internally generated intangible assets*

The problems regarding the recognition of internally generated intangible assets concern in dealing with uncertainties as:

- identifying whether and when exist an identifiable asset that will generate expected future economic benefits; and
- determining the cost of the asset reliably\(^{52}\).

Regarding the first uncertainty, if exist an identifiable asset that will generate future economic benefits, the standard identifies, first of all, the generation process. According to it, the generation process of an intangible can be divided into two phases: the research and development phase. The research phase is defined as the “original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding”\(^{53}\). The development phase, instead, is “the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use”\(^{54}\).

The standard decided to not allow the recognition of intangible assets arising from the research phase. According to the standard is not possible, in this phase, to prove the existence of an intangible that will provide any future economic benefit. The research expenditures, for this reason, must be expensed in the income statement. If instead, an entity is not able to divide the two phases, research and development, it should consider all the process as research phase, and expense all the costs.

\(^{52}\) International Accounting Standard 38, para. 21, (2008)
\(^{53}\) International Accounting Standard 38, para. 8, (2008)
\(^{54}\) International Accounting Standard 38, para. 8, (2008)
The standard setters consider it would be possible for the entity to recognize the existence of an identifiable intangible asset only during the development phase, which is more advanced than the research phase. Furthermore, the standard specifies the characteristics the intangible resources must have during the development phase to be considered intangible assets and to be possible their recognition. The entity should be able to prove all the following:

- the technical feasibility of completing the intangible asset, and the possibility at the completion to use or sell it,
- its intention to complete the intangible asset and use or sell it,
- its ability to use or sell the intangible asset,
- the way in which the intangible asset will provide probable future economic benefits,
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset,
- its ability to measure reliably the costs attributable to the intangible asset during its development\(^{55}\).

Once the existence of the asset is proved, it should be identified the cost at which to recognize it. The standard establishes that the cost must comprise “all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management”\(^{56}\). However, the standard prohibits to capitalize any precedent expenses related to the creation of the asset.

Moreover, the IAS 38 indicates specific intangible assets, that, if internally generated, can never be recognized:

- brands, mastheads, publishing titles, customer lists and items similar in substance;
- internally generated goodwill;
- expenditures related to start-up activities, training activities, advertisement and promotional activities, reallocation or reorganization of part or all the entity;
- past expenditures on intangible assets that was initially expensed, should not be capitalized at the recognition of the intangible asset\(^{57}\).

**Successive measurement**

After the initial measurement of the intangible assets at cost, the entity has the possibility to choose its accounting policy between the cost model and revaluation model. Under the cost

\(^{55}\) International Accounting Standard 38, para. 57, (2008)

\(^{56}\) International Accounting Standard 38, para. 66, (2008)

\(^{57}\) International Accounting Standard 38, para. 48, 63, 69, 71, (2008)
method, the intangible asset must be recognized at its cost less any accumulated depreciation and any accumulated impairment loss\textsuperscript{58}. While the revaluation method is applicable to those intangible assets for which exist an active market. Under this model, an intangible asset shall successively be recognized at a revalued amount, which corresponds to its fair value at the date of revaluation less any accumulated depreciation and any subsequent accumulated impairment loss\textsuperscript{59}.

Successively, it is important to identify the useful life of the intangible asset. In deciding if the intangible asset has a finite or indefinite useful life, the standard provides some specific elements or situation to consider\textsuperscript{60}. For instance, the useful life of an intangible asset can be more easily estimated when public information on similar assets and on their usage, is available. A good indicator of the duration is also the period of legal control that the entity can enjoy on the asset, plus any possible renew of that right at a trivial cost. In estimating the useful life of an intangible, the entity should also evaluate if a different management team would manage effectively that assets.

It is possible that an entity may not be able to identify the period on which the intangible asset will distribute its economic benefits, even after taking in consideration all the elements and the situations provided by the standard. In this circumstance, the asset should be classified as having an “indefinite” useful life, which does not mean “infinite” useful life.

In the case in which the intangible asset has a finite useful life, even if the standard provides the possibility to choose between the cost model and the revaluation model for the successive measurement, typically the asset will be measured following the cost model. The amount at which the intangible will be accounted for, at the end of each accounting period, is the cost less any accumulated depreciation and any accumulated impairment loss. The amortization method should represent the way in which the asset distributes its economic benefits to the entity\textsuperscript{61}. In addition, the standard requires to review annually the amortization period and amortization method.

The intangible assets with an indefinite useful life must not be amortized. Instead, they must be tested annually for the impairment, or in any circumstance which may indicate a loss of value. An impairment loss will be recognized if the recoverable amount of an intangible asset is less than its carrying amount. Indeed, the carrying amount of the intangible shall be reduced to its

\textsuperscript{58} International Accounting Standard 38, para. 74, (2008)
\textsuperscript{59} International Accounting Standard 38, para. 75, (2008)
\textsuperscript{60} International Accounting Standard 38, para. 90, (2008)
\textsuperscript{61} International Accounting Standard 38, para. 97, (2008)
recoverable amount, and the difference will represent the impairment loss. If in the successive years the entity has evidence that the impairment loss, recognized previously, does not exist anymore, the entity shall reverse the carrying amount of the intangible. The reversed carrying amount of the intangible asset shall not exceed, anyway, the carrying amount that the asset would have if no impairment loss would be recognized in the previous years. Moreover, annually the company must review the useful life and the persistence of the elements that support the indefinite useful life of the intangible.

**Disclosures**

The required disclosures on intangible assets are stated in IAS 1, IAS 38, and IFRS 13. The IAS 1 requires to the companies, when drawing up the financial statements, to present the intangible assets in a separate line on the balance sheet. The IAS 38, being specifically on intangible assets, indicates the information on the intangible asset that must be disclosed. For instance, in each class of intangibles, the company must distinguish between the internally generated ones and the acquired ones, their useful life and the amortization rate, the reconciliation of the carrying amount between the beginning and the end of the year. Moreover, additional information must be provided for the individual intangible assets that are material to the entity. Finally, the IFRS 13 requires disclosures on the fair value measurement of the intangible assets, as valuation techniques and inputs.

The IAS 38 is not requiring to disclose any information on internally generated resources as brands, mastheads, publishing titles, customer lists and so on. Even if an entity controls these assets, they are not recognized on the financial statements because they do not meet the recognition criteria. Anyway, the standard is encouraging the entities to provide additional information on these intangibles in the notes or in the management reports because they may be significant for the stakeholders. For this reason, the current disclosure on intangibles is known as “mainly voluntary disclosure”.

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64 International Accounting Standard 38, para. 118, (2008)
1.3.2 US Generally Accepted Accounting Principles

Nowadays in 125 countries the IFRS Standards are required for domestic public companies, and they are permitted in many more countries. The reasons behind its expansion is the globalisation of the capital markets which leads to an increased demand from the investors, the analyst, the regulators and others for transparent and internationally comparable financial statements. Anyway, these standards are still not adopted globally. The major capital markets without an IFRS mandate are: Japan, where the voluntary application is allowed; China, which states that it is its intention to fully converge to them at an indefinite time; and the USA. Even if the application of the accounting standards issued by the IASB is expanding around the world, it is not possible to disregard the fact that the main capital market in the world – USA – is continuing to use its own Generally Accepted Accounting Principles (GAAP), issued by the Financial Accounting Standard Board (FASB).

On September 18, 2002, at the meeting between the IASB and the FASB in Norwalk, Connecticut, USA, the two organizations agreed that it would be positive for the capital markets to have a common accounting standard system. Both organisations express their intention to develop a single set of high-quality “accounting standards that could be used for both domestic and cross-border financial reporting”. In particular, the agreement was to make compatible as soon as possible the two existing reporting standard systems, IFRS and GAAP, and to coordinate the future work and programs in order to maintain that compatibility once achieved.

In November 2007, the Securities and Exchange Commission (SEC) introduced the possibility for the foreign private entities operating in the USA, to present the financial statement according to the IFRS without the need to reconcile it to the GAAP anymore. This, anyway, is far from reaching the objectives established in “The Norwalk Agreement”. The main accounting institutions in the USA are still reluctant to the idea of adopting the IFRS in their country as we can see from the next timeline.

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The general opinion is that for the total convergence between the IFRS Standards and US GAAP the capital markets have still to wait. This is the reason why it is important to understand also the provisions of the US GAAP, and, in particular, those regarding the treatment of the intangible assets, for the scope of this thesis.

**ASC 350, Intangibles – Goodwill and Other**

Under the GAAP, the accounting provisions regarding the intangible assets and goodwill are treated on the ASC 350. The standard is composed of five subtopics:

- 350-10 Overall;
- 350-20 Goodwill;
- 350-30 General Intangibles Other Than Goodwill;
- 350-40 Internal-Use Software;
- 350-50 Website Development Costs.

**ASC 350-10 Overall**

As the IAS 38, also the ASC 350, in the first subtopic, defines its scope of application. It is not applicable to:

- the initial accounting for goodwill acquired in a business combination (ASC 805-30) or in an acquisition by a not-for-profit entity (ASC 958-805).
- the initial accounting for intangible assets other than goodwill acquired in a business combination or in an acquisition by a not-for-profit entity (ASC 805-20 and ASC 958-805).
- research and development costs (ASC 730-10)
- extractive activities (ASC 932)
- entertainment and media, including records and music (ASC 928)
Like the IAS 38, on the subtopic 350-10-20, the ASC 350 defines the meaning of different keywords. According to that definitions, intangible assets are “assets (not including financial assets) that lack physical substance”\(^{72}\). The goodwill is instead defined as “an asset representing the future economic benefits arising from other assets acquired in a business combination or an acquisition by a not-for-profit entity that are not individually identified and separately recognized”\(^{73}\). The standard underlines that the term intangible asset is used to refers to intangible assets, other than goodwill, even if the goodwill is an intangible asset\(^{74}\).

ASC 350-20 Goodwill

As underlined in the definition of goodwill, according to the US GAAP, it is an unidentifiable intangible asset. This means that the goodwill cannot be reliably measured, and it must be recognized separately from identifiable intangible assets\(^{75}\). The treatment of the goodwill is, anyway, quite similar to the one under the IAS 38:

- the cost of the internally generated goodwill must be expensed, and it is not recognized on the balance sheet;
- and, the initial recognition of the acquired goodwill is specifically treated in the standard regarding the Business Combination.

The goodwill shall, when recognized during business combination, to be allocated to the reporting units, which is an operating segment or one level below. What the ASC provides, in addition, is the subsequent measurement of the goodwill. According to the standard, the goodwill is considered to have an indefinite useful life, consequently it is not amortizable but

\(^{72}\) Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 10.20 (https://asc.fasb.org/glossarysection&trid=2144426)  
\(^{73}\) Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 10.20 (https://asc.fasb.org/glossarysection&trid=2144426)  
\(^{74}\) Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 15.3 (https://asc.fasb.org/glossarysection&trid=2144426)  
subject to a unique impairment testing technique\textsuperscript{76}. The goodwill should be impaired when its carrying amount exceeds its fair value. The difficulty consists in the fact that the fair value of goodwill cannot be measured directly, but only as a residual of the fair value of the reporting unit to which it belongs. The fair value of goodwill is an implied value.

Furthermore, the standard requires to the entity to disclose at the end of year the changes in the carrying value of goodwill and the reasons behind, to describe the facts and circumstances that lead to an impairment loss, and more specific information about the goodwill that may result useful to the users of the financial statement.

\textit{ASC 350-30 General Intangibles Other Than Goodwill}

The subtopic 350-30 treats the financial accounting and reporting of the intangible assets, excluding goodwill. It takes into consideration all the intangibles obtained individually, in a group of assets, during a business combination, or internally generated. In any case, it does not give indications on initial recognition and initial measurement of intangible assets obtained during a business combination or in an acquisition by a not-for-profit entity. These aspects are treated in the standards that regulate these transactions. After the acquisition, anyway, the ASC 350-30 is applicable also to those intangible assets for the financial accounting and reporting.

Regarding the initial recognition, the standard provides for the intangible assets externally obtained, the individual recognition at fair value, as provided also by the IAS 38\textsuperscript{77}. For the internally generated intangible assets, the US GAAP are, instead, stricter and prohibit to capitalize the costs of internally developed, maintained, or restored intangibles, including goodwill (ASC 350-30-25-3)\textsuperscript{78}. The exceptions provided are the software developed for internal use and website development costs, which are discussed in the last two subtopics.

The subsequent accounting treatment of the intangible assets, other than goodwill, is similar to the one provided by the IAS 38. An intangible asset that has a finite useful life must be amortized following a pattern that considers the distribution of the economic benefits of the asset during its useful life and it is subject to impairment test in presence of particular circumstances, as provided by the subtopic 360-10\textsuperscript{79}. Instead, intangible assets with an indefinite (not infinite) useful life, must not be amortized but impaired annually, and, in


\textsuperscript{77} Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 30-25-2

\textsuperscript{78} Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 30-25-3

\textsuperscript{79} Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 30 (https://asc.fasb.org/glossarysection&trid=2144426)
addition, in the circumstances that indicate that the carrying amount of the asset may be higher than its fair value.

To estimate the useful life, the standard indicates some specific criteria to be taken into consideration as:

- the intended use of the asset by the entity;
- the forecasted useful life of a different group of assets to which the useful life of the intangible asset is related;
- any legal, regulatory or contractual provision that may limit the useful life of the asset, or any provision that permit to renew it;
- the entity’s own historical experience in renewing similar assets, and, if the entity does not have a similar experience, the management’s consideration and estimates;
- the effects of obsolescence, demand, competition and other economic factors;
- the level of expenditures needed to maintain the expected future cash flow from the asset.\(^{80}\)

The US GAAP explicitly treat the defensive intangible assets. These assets are usually obtained in a business combination or in an asset acquisition, but the management does not intend to actively use them. The benefits arising from these assets consist in preventing others to own or to access to them, and reduce competition. They are also known as “locked-up assets”\(^ {81}\). Regarding the accounting treatment, these assets must be recognized initially, as the other intangible assets, at their fair value. When subsequently valuing them, these assets must be considered in a separate unit of accounting and may not be grouped with other assets. Their useful life is, typically, supposed to be finite, considering that not using them would cause lack of market exposure and would diminish their fair value over the time. The useful life should take into consideration the direct or indirect benefits of these assets to the cash flow of the entity. It is usually difficult to be calculated, so it is based on the management’s best estimate.

Finally, to allow to the financial statement users to have a transparent information on the intangible assets, the standard has some disclosure requirements. It provides that in the statement of financial position all the intangibles must be aggregated and presented on a separate line, with the possibility for the entity to present individual assets or class of assets separately. The amortization expenses and the impairment losses that may occur, must be presented in the income statement. In addition, the ASC 350 requires specific information to be

\(^{80}\) Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 30-35-3

provided in the notes of the annual report on the acquisition of intangible assets individually or in business combinations, on the intangible assets already present in the financial statement, and on the impairment losses arisen.

**ASC 350-40 Internal-Use Software**

One of the few intangibles that can be recognized in the financial statement under the US GAAP, if internally generated, are software for internal use. The software only projected, or developed for the sale, cannot be recognized. To identify a software for the internal use, the standard provides the following criteria:

- it has to be acquired, internally developed, or modified only to meet the needs of the entity;
- and, during the development phase or the modification, it does not exist a different plan or the intention to sell it\(^{82}\).

Not all the costs related to create a software for internal use may be capitalized. According to the standard’s provisions, it is not possible to capitalize the costs sustained during the “preliminary project stage” which include the “conceptual formulation, design, and testing of possible project alternatives, including the process of vendor selection for purchased software, if any”\(^{83}\). Instead is possible to capitalize the costs incurred subsequent to the preliminary project stage. Two conditions must be satisfied to make possible the capitalization of the costs:

- preliminary project stage has to be finished;
- the management has the relevant authority to authorize the project, takes the commitment to fund it, and it is probable that the software will be completed and used for the intended function.

Anyway, the standard provides a list of the costs that can be capitalized.

Also, the software developed for internal use must be amortized considering the period of time in which it is expected to provide the economic benefits to the entity. When estimating their useful life, the management should take into consideration factors as obsolescence, new technology, and competition.

In the specific case in which a software was developed for the internal use, but successively it is sold, the standard provides that any gain obtained has first to be applied in reduction of the

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\(^{82}\) Financial Accounting Foundation (US), 350 Intangibles – Goodwill and Other, para. 40-15-2A

carrying amount. When the carrying amount is totally reversed, the successive gains may be recognized as revenue in the income statement\textsuperscript{84}.

**ASC 350-50 Website Development Costs**

Some of the costs sustained by a company to develop a website may be capitalized. This because the costs to create a website, which provides services to the customers as chat rooms, search engines, social networking, etc are quite significant\textsuperscript{85}. The standard gives, in the last subtopic of the ASC 350, the necessary direction regarding the costs that may be incurred during the development of a website and their treatment. In general, anyway, it is not possible to capitalize the costs incurred in the planning stage, which must be expensed. The costs that may be capitalized are, for example, the cost of software used to operate a website, the costs to develop the graphics, and so on. In this case, as for the internal-use software, it is considered that the company is not developing the website for sale.

**1.3.3 Key differences between IFRSs and US GAAP regarding intangible assets and goodwill**

Even if the definition and the recognition criteria of intangible assets are similar under the IFRS and US GAAP, some relevant differences persist in their accounting treatment. For instance, under the two accounting systems, the internally generated intangible assets are treated differently:

- under the IFRS, it is possible to recognize an internally generated intangible asset by capitalizing its development cost (apart those expressly prohibited by the IAS 38 as brands, mastheads, computer software, licences and so on);  
- under the US GAAP, it is not possible to recognize any internally generated intangible asset (apart from internal-use software and website development cost, as provided by ASC 350).

The treatment of intangible assets after the initial recognition is quite similar, with the difference of the revaluation of intangible assets other than goodwill. While the revaluation model is applicable, under the IFRS, for those intangible assets for which exist an active market where their fair value can be determined, this is prohibited under the US GAAP. Indeed, under


the US GAAP, the revaluation of intangible assets other than goodwill is not allowed after the initial recognition\(^86\).

Another important aspect that differentiates the US GAAP from IFRS, is the treatment of the research and development costs. As previously specified, the research costs under the IAS 38 are expensed, while the development costs, which meet specific criteria, are capitalized. Under the US GAAP instead, the research and development costs are treated according to ASC 730, which provides that both type of costs must be expensed\(^87\).

In addition, the standard setters are making difference in the allocation of goodwill. Under the IFRS the goodwill must be allocated to the cash-generating units, while under the US GAAP it has to be allocated to the reporting unit. These allocations will represent the level at which impairment test on goodwill will be performed.

So, even if the IASB and the FASB are collaborating for an increased convergence, differences in the accounting treatment of intangible assets still exist and impact in the comparison between companies that follow the two different set of standards.

### 1.4 Mandatory Disclosure VS Voluntary Disclosure

The financial reporting is essential for the functioning of the capital markets because it ensures that the funds continue to flow from investors to the companies. The financial information that companies provide to markets, is not represented only by the financial statements, but also by management reports, press releases, presentations, company’s website and so on\(^88\). However, the standard setters may influence only the information disclosed by the companies on their financial statements.

The IASB is working continuously for improving the financial information that the companies provide to their stakeholders because this information influences their economic decisions. The standards, that the IASB is issuing, are aiming to obtain standardized information from companies to make possible their comparison and also high quality disclosures to reduce the investors’ concerns about the inside information. Vera Palera made a very clear example of why the quality of the disclosure is important: “as a used car dealer who develops a reputation

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86 Deloitte, “Goodwill and other intangible assets — Key differences between U.S. GAAP and IFRSs”, https://www.iasplus.com/en-us/standards/ifrs-usgaap/goodwill (last viewed 06/12/17)
87 Financial Accounting Foundation (US), 730 Research and Development, para 25.1
88 Ernst & Young, “Improving disclosure effectiveness”, pp 4, (July 2014)
for honesty and fair dealing will enjoy higher sales prices, a firm with a credible policy of high quality information is expected to enjoy higher share prices and a lower cost of capital”\textsuperscript{89}.

Previously it was illustrated the general accounting treatment of the intangible assets under the IFRS and under the US GAAP. The academics have mainly two different opinions regarding the adequacy and the efficiency of the accounting treatment of intangibles under this accounting standards. The first group of scholars and researchers believes the voluntary disclosure encouraged by the standards setters, regarding the intangible assets, especially the not recognized ones, is insufficient to provide the information the stakeholders need. So, they claim that the financial reports have lost their relevance. Contrarily, the second group, which supports the “accounting conservatism” principle, considers the provisions of the standards sufficient and adequate, given the difficulties and the uncertainties related to the identification, the valuation and the control of the intangible assets. The accounting conservatism principle is defined by Sudipta Basu as “the accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses”\textsuperscript{90}. This principle leads many times to the immediate expense of the investments in intangible assets because they are considered riskier than the investments in tangible and financial assets. In this way, most of the times, the internally generated intangible assets will not be recognized on the balance sheets.

### 1.4.1 Mandatory disclosure

According to Wyatt “intangibles are at the centre of an information gap that arises from the forward looking and uncertain nature of economic activity”\textsuperscript{91}. While David Haigh, CEO of Brand Finance plc and Chairman of the Brand Finance Institute, speaking about the intangible assets is claiming that “there needs to be a concerted call from all stakeholders to demand that long-neglected ‘Cinderella Assets’ should finally be allowed to attend the annual financial reporting ball!”\textsuperscript{92}.

So, the researchers that consider the current accounting treatment of intangible assets inadequate, have identified four main problems:

- the decreasing of the value relevance of financial information;


\textsuperscript{92} Brand Finance Institute, “Global Intangible Finance Tracker 2017: An annual review of the world’s intangible value”, pp 8, (June 2017)
- the inadequacy of the resources’ allocation in the capital markets;
- the impact that the accounting requirements have on intangibles investment;
- the market value misvaluation.

Value relevance of financial information

As provided by the accounting standards, most of the investments made in intangibles, especially in the ones internally generated, are expensed once incurred to respect the “accounting conservatism” principle. However, the benefits arising from those assets will be recorded later, during the life of the company. In this way, it results not being respected the principle of periodically matching the costs with revenues provided by the accounting setters. This issue may impact the decisions that the different stakeholders take on the basis of the financial statements. They may consider that the information presented is distorted or is not any more value relevant. In fact, according to a research performed by Lev and Zarowin in 1999 on American firms, the value relevance of the accounting information for the investors was decreasing during the previous years. The two authors attributed the result to the requirement of immediately expense the R&D costs which were depressing the earnings and the book value of the firm. However, these costs were usually generating cash flow and enhanced the value the firms during the following accounting periods. So, scholars and researchers concluded that the value relevance of financial information is reduced because of the inadequate treatment of internally generated intangible assets.

Resources Allocation in the Capital Markets

A second problem, caused by the insufficiency of the disclosure on the intangible assets, that the scholars have individuate, consists in the inefficient allocation of the resources on the capital markets. They identify the origin of this problem in: the information asymmetry, the high cost of capital, the riskiness, and the illiquidity of intangible assets. The information asymmetry is caused by the information gap existing between the management of the company and the external stakeholders. The management, indeed, has a complete and full knowledge about the research and development activities of the company, and about all the

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intangible resource available to it, but which does not meet the criteria to be recognized as assets. The information instead available to the external stakeholders is limited. They will have to rely on the limited amount of compulsory information required on the intangible assets on the financial statement and the amount of voluntary information that the management is willing to provide.

A consequence of the information asymmetry is the higher cost of capital required to the intangibles-intensive firms. Given the awareness of the external investors that they are missing relevant information on intangible assets, or on the output of the research and development activities, they are willing to accept to hold shares of those companies if they get a higher return rate for the disadvantageous position\textsuperscript{97}. Seow, Shangguan, and Vasudevan confirmed this with a research in 2006. They found empirical evidence of the positive correlation between the cost of capital and the R&D expenditures of USA companies\textsuperscript{98}.

Moreover, the R&D activities, and more in general, the intangible assets are considered as highly risky. This aspect, too, causes an increase in the cost of capital required by the capital provider\textsuperscript{99}.

Seow, Shangguan, and Vasudevan have also underlined how the shares of intangible-intensive firms, are less liquid because of the difficulty for the investor to value the intangibles. This difficulty arises from the nature of the intangibles, but also from the information asymmetry, as already discussed\textsuperscript{100}.

So, some researchers claim that the factors discussed above, are consequences of the inadequate accounting treatment of internally generated intangibles, which in this way lead to the misallocation of resources in the capital market.

\textit{Intangibles investments}

An additional consequence identified by some academics, from the inadequate accounting treatment of intangible assets, is a suboptimal level of investment in these assets\textsuperscript{101}. The results of the researches done in this field are quite contradictory. Many research papers demonstrate

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an increase of the total amounts invested in R&D activities during the years worldwide, even if at different rates. However, some other authors and researchers criticize the conclusions reached. According to authors like Aboody, Lev, Cazavan-Jeny, Sougiannis, it is more significative to calculate the growth rate of the R&D investments in relation to the business growth\textsuperscript{102}. Indeed, they proposed to calculate the ratio between the total R&D and the total assets of the company, to have an idea of R&D investment intensity.

According to this second ration, they calculated that the UK firms from 2001 to 2007, experienced a decrease in the percentage of investments in intangible assets, while the USA firms have not substantially increased their investment in R&D activities\textsuperscript{103}. The blame falls again on the inadequate accounting treatment of intangibles, even if it is actually difficult to prove.

**Market value misevaluation**

Some researchers are of the idea that when the R&D costs are expensed, the earnings and the book value of the companies are underestimate, and consequently, the investors will undervalue them in the capital market\textsuperscript{104}. Actually, according to the research presented by Lev, in 2005, the current treatment of the R&D costs leads sometimes to undervaluation and sometimes to overvaluation of the companies in the capital markets\textsuperscript{105}. When the companies are doing high investments in R&D activities, they will probably be undervalued because the costs will be expensed. This happens, for instance, for the young companies, biotechnology companies, and emerging industries. Later, when the benefits from the R&D will begin to flow to the companies, they will be overvalued by investors, because of reporting earnings that are related to assets not recognized in the balance sheet and for this reason seeming much better of what they actually are. So, the under or overvaluation of companies on the capital market depends on their size, age and economic sector of the economy.


In any case, the authors, generally agree on the fact that “the inadequate accounting treatment of internally generated intangibles leads to systematic misvaluation of companies”\textsuperscript{106} even if they do not agree if the companies are undervalued or overvalued on the capital markets.

All the issues analysed above are convincing many researchers to ask at the standard setters for more mandatory disclosure on the intangible assets of the companies. They are stating that the relevance of the financial statements is considerably decreased since the intangible assets have become the new economic key driver of the economy. Indeed, the disclosures required by the standards to companies, on the existence and the value of their intangibles, is limited and not informative to the users of the annual reports. For this reason, each stakeholder needs to take into consideration more sources of information, apart the financial statement, in taking any kind of decision.

\textbf{1.4.2 Voluntary disclosure}

The supporters of the current “voluntary disclosure” on the intangible assets are underling the importance of the “accounting conservatism” principle. They are pointing out that this principle would not be respected under mandatory recognition of intangible assets because the reliability of the measurement of the intangible assets would be challengeable\textsuperscript{107}. For this reason, they consider the current accounting treatment of intangibles adequate. In particular, given that the standard setters try to incentivize the managers to use the voluntary disclosure to “bridge the gap between a firm’s financial statement numbers and its underlying business fundamentals”\textsuperscript{108}.

In 2002, the European Commission, in the field of MERITUM project, developed “Guidelines for Managing and Reporting on Intangibles”. It is considered the main output of the project and consist in providing the conceptual framework and processes to be followed by those firms which want to have a better knowledge of their intangible assets and which want to report them externally, as encouraged by the IAS 38.

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The authors and researchers defending the “voluntary disclosure” are also sustaining that the financial markets are working well even following the current accounting treatment of intangibles. Indeed, the wealth produced by the intangibles, flows through the revenues in the income statement, and in this way, the users of the financial statement can infer the value of these assets\(^\text{109}\).

Moreover, according to the supporters, the managers can use the voluntary disclosure to compensate the loss of relevance of the financial information. Indeed, the research of Jones, in 2007, on 119 US companies, found that the managers of intangible-intensive firms tend to disclosure more information than the once required about the intangible assets in their annual reports and during the conference calls, this to supply to the diminished relevance of the financial information\(^\text{110}\).

Consequently, as many studies prove, the increase in the voluntary disclosure of managers, helps in reducing also the illiquidity of the stocks, the asymmetry information, as well as the cost of capital. For example, according to the research performed by Orens, Aerts, and Lybaert, in 2009 on European Companies, the higher amount of disclosures on intangible assets presented on their website, was associated with the lower information asymmetry and the lower cost of capital\(^\text{111}\).

The managers prefer also to increase the level of voluntary disclosure when they are making high investments in intangible assets, especially in the ones internally generated through R&D. This is proved by the study of Vergauwen, Bollen, and Oirbans made in 2007 on European companies\(^\text{112}\). Indeed, they found empirical evidence of the positive correlation that exists between the investments in intangible assets of a company and the amount of voluntary disclosure provided.

As for the previous issues, also regarding the market value, there are several research papers demonstrating that there is a positive relationship between the voluntary information provided about the intangible assets and the market capitalisation of that companies. Orens, Aerts, and Lybaert in 2009, studying the EU companies, found that the firm value is positively correlated to the information on intangible provided on their corporate website\(^\text{113}\).

\(^{109}\) Penman, S. H., “Accounting for Intangible Assets: There is Also an Income Statement”, Abacus, 45(3), (2009)
\(^{113}\) Orens, R., Aerts, W., and Lybaert, N., “Intellectual capital disclosure cost of finance and firm value”, Management Decision, 47(10), (2009)
Finally, as confirmed by Zéghal and Maaloul the “publicly disclosed information about intangibles can supplement the financial information, and so capital markets reward companies for increased disclosure”\textsuperscript{114}.

Both opposite sides, anyway, agree that the intangible assets have become the main value driver for many firms and in many economy fields. But their valuation within the accounting standards raise several problems as their identification, measurement and control. Given the conservatism of the accounting setters in this ambit, the only solution that can improve the situation of the companies which want to provide more information than the once required by the standards is the “voluntary disclosure”. At least, until the standard setters will upgrade the accounting standards and the financial information provided will regain its relevance into the “new economy”.

Chapter 2: Intangible assets in business combinations

The business combinations are often seen by companies as a method to increase their value or to stabilize the volatility of their earnings. During a business combination, many are the uncertainties and the challenges the counterparts must face. One of them is the valuation of the intangible assets. The acquiree will try to outline the value of its intangible assets and the existence of not recognized ones in the balance sheet. The acquirer, however, will try to make a reliable valuation to avoid overpaying. While the two counterparts are more interested in the valuation issues, the standard setters are interested in providing transparent and reliable information to the financial statement users’ on the business combination.

The first accounting treatment of the business combinations was established by the IASC in November 1983, when IAS 22 Accounting for Business Combination was issued. It was revised and renamed IAS 22 Business Combination in December 1998, with subsequent changes in October 1998. The IAS 22 remained applicable, even after the establishment of the IASB, until March 2004, when it was replaced by the IFRS 3 Business Combination\textsuperscript{115}.

The project of development of the IFRS 3 can be divided into two phases. The first one, which ended with its introduction in March 2004, was characterized by the decision of the standard setter to consider all the business combinations as acquisitions, and the decision to require a single method of accounting for the business combinations, which was the purchase method\textsuperscript{116}. The second phase of the project was instead focused on reaching a higher degree of convergence with the US GAAP. The collaboration between the IASB and FASB on the accounting of business combination, resulted in a revised version of IFRS 3 and an amended version of IAS 27 Consolidated and Separate Financial Statements, in January 2008, as well as the amendment under the US GAAP of ASC 805 Business combination and the issuance of ASC 10 Noncontrolling Interests in Consolidated Financial Statements. These standards are considered the result of the first major project of collaboration between the IASB and FASB\textsuperscript{117}. Even if the standards have some differences, these are not so relevant for this thesis to be treated separately.


\textsuperscript{116} International Financial Reporting Standard 3, para IN1, (2008)

2.1 IFRS 3 Business combination

The current IFRS 3, the revised version of the one issued in 2004, is known as IFRS 3 Revised and was issued in January 2008. It came into effects, for all the business combinations, since July 2009. The purpose the IASB was to guarantee to the users of the financial statements relevant, reliable and comparable information on these transactions.

The IFRS 3 (R) defines the business combinations as “a transaction or other event in which an acquirer obtains control of one or more businesses”. In its last version, the standard considers as business combinations also the “true mergers” and the “mergers of equals” because, according to the standards setters, it is always possible to identify an acquirer and an acquirer.\textsuperscript{118} The transactions excluded from the scope of application of the IFRS 3 (R) are the joint ventures; the acquisition of an asset or a group of assets that does not represent a business; and the combination between entities that are under common control.

The provisions of the standard cover three main areas:

- the recognition and the measurement in the financial statement of the identified assets, liabilities and any non-controlling interest in the acquiree obtained with the acquisition;
- the recognition and the measurement of any goodwill acquired in the business combination or the gain deriving from the bargaining power of the acquirer;
- the disclosures necessary to allow to the users of the financial information to evaluate the business combination and its effects.\textsuperscript{119}

Trying anyway to analyse the evolution of the accounting discipline for business combination it is important to begin from the required method to account for the transaction.

Under the different versions of IAS 22, it was possible to choose between two methods to account for business combinations: the pooling of interest method or the purchase method. The pooling of interest method was applicable to the transactions considered mergers. Under this method, all the assets and liabilities of the entities involved were combined at their historical values, and the internally generated intangible assets, not disclosed in the financial statements, could not be recognized. The purchase method instead was applicable to the acquisitions. In these cases, the assets and liabilities of the target were recognized at their fair value at the acquisition date. Moreover, it was also possible for the acquirer to recognize the intangible

assets internally generated not present in the financial statement of the acquiree\textsuperscript{120}. However, applying these different accounting methods for similar business combinations gave rise to dramatically different results in the financial statements. For the users of the financial statements it was not possible to compare the financial results of companies that passed through business combinations but applied different methods of accounting for the transaction. Also for the managers it became clear that the different accounting methods were affecting the competitiveness of the companies in the market of the mergers and acquisitions\textsuperscript{121}.

However, with the introduction of the IFRS 3 in 2004, the standard setters emphasized the concept that actually any business combination has an acquirer, claiming that “‘true mergers’ or ‘mergers of equals’ in which none of the combining entities obtains control of the others are so rare as to be virtually non-existent”\textsuperscript{122}. This is why the “pooling of interest” method has been eliminated with the first version of the IFRS 3 and was maintained only the purchase method. Nowadays, under the current IFRS 3 (R), the “acquisition method” is applied to account for the business combinations. This method is a variation of the “purchase method”, which was present in the previous version of the standard\textsuperscript{123}.

The main steps to be performed applying the acquisition method are:

- identify the acquirer;
- identify the acquisition date;
- recognize and measure all the identifiable assets, liabilities assumed, and any non-controlling interest;
- recognize and measure the goodwill or the gain deriving from the bargaining power\textsuperscript{124}.

Anyway, the purpose of this thesis is not the treatment of business combinations in general, but the treatment of intangible assets and goodwill in the business combinations.

### 2.1.1 Intangible assets in Business Combination

The current IFRS 3 (R) requires the recognition at fair value of all the identifiable assets, liabilities and non-controlling interest at the acquisition-date. To be recognized, the assets and

\begin{itemize}
  \item Deloitte, “IFRS 3 – Business Combination”, (last viewed 17/11/17)
\end{itemize}
liabilities at the acquisition date must meet the definitions provided in the *Framework for the Preparation and Presentation of Financial Statements*:

- an asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity,
- a liability is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits\(^\text{125}\).

According to this requirement, the acquirer must identify also the assets and the liabilities that are not included in the acquiree’s balance sheet. In particular, regarding the intangible assets, the IFRS 3 (R) provides that “the acquirer shall recognise, separately from goodwill, the identifiable intangible assets acquired in a business combination”\(^\text{126}\). With the expression “identifiable intangible assets” the standard setters underline that the intangibles must meet the separability criterion or the contractual-legal criterion to be recognized, independently by the fact if they were previously recognized in the balance sheet of the acquiree or not. This is the point of arrival into the evolution of the criteria required to recognize the intangible assets during a business combination.

Until 1998 the IAS 22 were requiring the recognition at fair value of the “identified” assets and liabilities\(^\text{127}\). This was meaning that it was not possible for the acquirer to recognize any intangible assets internally generated by the acquiree that was not already recognized in its balance sheet.

During the last decade of the century, the standard setters began to recognize the importance of individually identifiable intangible assets because it became evident that the intangible assets were making up an increasing portion of the assets of many companies. They noticed that usually, during the business combination, the intangible assets were most of the times included in the goodwill.

So, the standard setters decided to introduce in the revised version of IAS 22, in 1998, the requirement to recognize the intangible assets, that were non-recorded on the acquiree’s balance sheet, if two criteria were respected:

- it was probable that an economic benefit would flow to the entity; and

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there was a reliable measure of the cost or the fair value.

The requirement of reliable measurement was, and it is still today, quite difficult to be respected for intangible assets. This because it is notoriously hard to measure the intangibles and because, in many cases, their value is influenced by businesses’ capacity to use them. This was the main reason why they continued to be included in the goodwill and not be recognized individually.

In the first version of the IFRS 3, of 2004, it was included the requirement to recognize the identifiable assets at fair value, without providing anymore the possibility to recognize them at cost\(^{128}\). In particular, for the intangibles was provided that their fair value “should be reliably measurable to be recognised separately”\(^{129}\). Indeed, the IASB arrived at the conclusion that recognizing the intangible assets separately from goodwill provides better information to the users of the financial statement, even if their valuation was requiring a significant degree of judgement.

That conclusion of the board was enhanced through the amendments to the IAS 38 in 2008 and with the issue of the revised IFRS 3. The standard setters removed the requirement of the reliable measurement criterion for the intangible assets recognized in business combinations. Indeed, both, FASB and IASB, concluded that the fact that an intangible asset arises from contractual or other legal rights is an important characteristic that distinguishes it from goodwill and an acquired intangible asset with that characteristic should be recognised separately\(^{130}\). So, under the current IAS 38, “if an asset acquired in a business combination is separable or arises from contractual or other legal rights, sufficient information exists to measure reliably the fair value of the asset”\(^{131}\). The aim of the standard setters, eliminating the reliable measurement criterion, was to obtain more useful information for the financial statement users’, by requiring to companies to recognize all the separable intangible assets during the business combination.

According to the standard, the specific cases in which is not possible to reliably measure the fair value of an intangible asset even if it arises from legal or contractual rights acquired in a business combination, are when:

- it is not separable; or
- it is separable, but there is no history or evidence of transactions that exchange the same or similar assets, and so the estimation of the fair value depends on immeasurable variables\(^{132}\).


\(^{131}\) International Accounting Standard 38, para 33, (2008)

The next figure is summarising the current criteria to be followed to recognize the intangible assets during a business combination.

**Figure 5: Intangible Assets in a Business Combination: Identifying and Valuing Intangibles under IFRS 3, Grant Thornton, (November 2013)**

The standard clarifies also some situations where doubts may arise on the recognition of an intangible asset. It specifies that the intangible assets that meet the contractual-legal recognition, even if they are not transferable or separable from other rights and obligation should be recognized individually, separately from goodwill. In particular, in the case of an intangible asset that is not individually separable from the combined entity or from the acquiree, it has, however, to be recognized separately if it is possible to separate it in combination with a related contract, an identified asset or a liability. An example provided by the standard is a registered and documented trademark, which is not transferable without transferring also the unpatented technical expertise used to manufacture the product protected by the trademark. Also in the case in which an acquirer is reacquiring a right that he has previously guaranteed to the acquiree, the acquirer must recognize this reacquired right as an intangible asset separately from the goodwill. Examples of this types of rights provided by the standard are “a right to use the acquirer’s trade name under a franchise agreement or a right to use the acquirer’s technology under a technology licensing agreement”. The fair value of this intangible should be calculated and amortized considering the remaining contractual terms.

The IFRS 3 is providing also a detailed classification of the intangible assets, identifying five categories: marketing-related intangible assets, customer-related intangible assets, contract-based intangible assets, technology-based intangible assets, and artistic-related intangible assets.

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assets\textsuperscript{135}. From the figure 6, it is possible to understand each intangible asset at which category belongs.

\textbf{FIGURE 6: GLOBAL INTANGIBLE FINANCE TRACKER 2017: AN ANNUAL REVIEW OF THE WORLD’S INTANGIBLE VALUE, BRAND FINANCE INSTITUTE, (JUNE 2017)}

<table>
<thead>
<tr>
<th>Marketing-Related Intangible Assets</th>
<th>Customer-Related Intangible Assets</th>
<th>Contract-Based Intangible Assets</th>
<th>Technology-Based Intangible Assets</th>
<th>Artistic-Related Intangible Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trademarks, trademarks</td>
<td>Customer brands</td>
<td>Licensing, royalties, standard agreements</td>
<td>Patented technology</td>
<td>Plays, costumes and backdrops</td>
</tr>
<tr>
<td>Trademarks, trade names, certification marks</td>
<td>Customer contracts &amp; related customer relationships</td>
<td>Advertising, construction, management, services &amp; supply contracts</td>
<td>Computer software and mask works</td>
<td>Books, magazines, newspapers and other literacy works</td>
</tr>
<tr>
<td>Trade dress (unique colour, shape or package design)</td>
<td>Non-competitive customer relationships</td>
<td>Lease agreements</td>
<td>Unpatented technology</td>
<td>Musical works such as compositions, song lyrics and advertising jingles</td>
</tr>
<tr>
<td>Newspapers</td>
<td></td>
<td>Construction &amp; rentals</td>
<td>Databases</td>
<td>Picture and photographs</td>
</tr>
<tr>
<td>Internet Domain Names</td>
<td></td>
<td>Franchise agreements</td>
<td>Trade secrets, such as secret formulas, processes, recipes</td>
<td>Video and audiovisual material, including films, music, videos etc.</td>
</tr>
<tr>
<td>Mastheads</td>
<td></td>
<td>Operating and broadcast rights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-competition agreements</td>
<td></td>
<td>Use rights such as drilling, water, air, mineral, timber, cutting &amp; route authorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sending contracts such as mortgage servicing contracts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment contracts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The standards setters specified also what should not be identified as an intangible asset. According to the IFRS 3 (R), the acquirer should include in the goodwill the value of any intangible resource that does not meet the criteria to be recognized as an intangible asset. For example, the acquirer should not recognize separately the value of the assembled workforce because the entity does not have enough control on it, and the value of potential contracts.

After the initial recognition at fair value of the individually identifiable intangible assets, the acquirer must account for them according to the provisions of the IAS 38.

According to the IFRS 3 (R), the research and development assets in-process acquired during a business combination should be recognized. The standard specifies that the intangible R&D assets must be classified initially as indefinite-life assets until the effects of the R&D efforts are or completed or abandoned. So, until the completion of the R&D project, these assets must be

tested for the impairment. After the completion or abandonment of the R&D efforts, the management should evaluate the possible useful life and amortize them accordingly\textsuperscript{136}.

2.1.2 Goodwill treatment in business combinations

The accounting setters (IASB, FASB) recognize the importance of the goodwill by allowing its recognition in a business combination. It represents, usually, a consistent quota of the acquisition price. The definition provided by both boards is identical: “goodwill is an asset representing the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized”\textsuperscript{137}.

The basis for the definition of the goodwill were defined by Johnson and Petrone, in 1998\textsuperscript{138}. They have identified 6 components of goodwill, which are:

1. the excess of the fair value of the net assets over their book value at the acquisition date;
2. the fair values of other net assets not recognized in the balance sheet of the acquiree because do not meet the identifiability criteria;
3. the fair value of the ‘going concern’ element existing business that is acquired;
4. the fair value of combining the acquirer’s and acquiree’s businesses and net assets;
5. the overvaluation of the consideration paid by the acquirer;
6. the overpayment (or underpayment) by the acquirer.

Anyway, according to the International Accounting Standard Board (IASB) the elements 1, 2, 5 and 6 are not conceptually part of the goodwill, in particular, elements 5 and 6 are related to measurement errors. So, only the third and the fourth elements, the “going concern goodwill” and the “combination goodwill”, are considered the “core goodwill”\textsuperscript{139}. The “going concern goodwill” takes into consideration the ability of the acquirer to earn a higher return on an assembled collection of net assets than the return obtained from those assets operating separately. It considers the synergies between the assets that the seller was able to obtain, the efficiency and effectiveness of the organization, the reputation already created, as well as the trained workforce. The “combination goodwill” represents the synergies arising from the business combination, the value of which is unique to each combination.

The goodwill includes all those intangible resources that the acquirer is not able to specifically identify, as assembled workforce. It represents the future economic benefits that will arise from those assets and is considered an intangible asset which can be recognized only during a business combination. The IAS 38 explicitly prohibits to capitalize the internally generated goodwill. The inconsistent treatment can be explained by the verifiability of the acquired goodwill which derives from an open market transaction. The internally generated goodwill instead cannot be capitalized because it is not identifiable, and it is not separable from other assets.

Given the particularity of the goodwill, it is interesting to understand the accounting treatment required by the standard setters. According to the current provisions on the business combination, which require the application of the acquisition method, the calculation of the goodwill or of the gain from the bargaining power is the last task to be performed when accounting for a transaction. Because of the elusive nature of the goodwill, it cannot be measured directly, but can only be measured considering the other amounts identified as part of the business combination. For this reason, it is considered a residual asset.

The IFRS 3 (R) provides the rules to be followed to calculate the goodwill (or gain from bargaining power) when the acquirer is not purchasing 100% of the target. The acquirer will have to choose the option to measure the non-controlling interest, which consequently will impact the recognition of goodwill (or of the bargaining power). According to the first option, the non-controlling interest can be measured at fair value, and in this case the acquirer will recognize the entire amount of the goodwill (or the bargaining power). In the second case, the non-controlling interest can be measured at the “non-controlling interest’s proportionate share” of the acquiree’s net assets and, in this case, the goodwill (or bargaining power) recognized will represent only the portion of goodwill of the acquirer. The issue does not exist if the acquirer is buying 100% of the shares of the acquiree.

The goodwill or the gain from the bargaining power is measured as follows under the current IFRS 3 (R):

\[ GW = \text{Goodwill} \]
GBP = Gain from a bargain purchase

NI = Non-controlling interest in the acquiree, if any, measured at fair value; or as the non-controlling interest’s share of the acquiree’s net assets

CT = Consideration transferred, generally measured at acquisition-date fair value

PE = Fair value of the acquirer’s previously held interest in the acquiree if the acquisition was achieved in stages

NA = Net assets acquired—consisting of the acquisition-date fair values (or other amounts recognized under the requirements of IFRS 3 R) of the identifiable assets acquired and liabilities assumed.

GW (or GBP) = (CT + NI + PE) – NA \(^{144}\)

Under the first version of the IFRS 3, the costs of the services related to the performance of the business combination as accounting fees, advisory fees, consulting fees, finder’s fees, internal acquisitions department costs, legal fees, other professional fees, and valuation fees were included in the cost of the business combination, and were for this reason included also in the calculation of the goodwill. With the revised version of the IFRS 3, these costs are all expensed because they are not considered part of the fair value transaction between the buyer and the seller\(^{145}\).

At the day of the acquisition as required by IAS 36, the acquirer must allocate the goodwill at the cash-generating units that are expected to benefit from the synergies of the business combination, irrespective if other assets or liabilities of the transaction are assigned to those cash-generating units\(^{146}\). The cash-generating unit is defined by the IAS 36 as “the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets”\(^{147}\). The cash units at which the goodwill should be allocated must represent the lowest level of the entity.

After the initial recognition, the goodwill must be measured at cost and then reduced in case of impairment. It is not amortized because it is considering having indefinite useful life, and

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\(^{147}\) International Accounting Standard 36.6, (2008)
consequently it is tested annually for impairment and in any circumstance that may indicate that the carrying amount is greater than its recoverable amount. In case of an impairment loss, that should be allocated to the goodwill of the specific cash-generating unit, before being allocated to other assets within the same cash unit. The impairment loss should be recognized in the income statement, and once recognized, the IAS 36, does not allow any reversal of the goodwill in the subsequent periods.

It is possible that instead of paying for goodwill, the acquirer is getting a gain because of its bargaining power. It may happen for instance when the acquiree is forced to sell. In this case, the standard requires to the acquirer, before recognizing that gain, to reassess all the information on the identification of the assets and of the liabilities of the acquiree. According to the standard setters “the objective of the review is to ensure that the measurements appropriately reflect consideration of all available information as of the acquisition date”. After the review, if the gain is confirmed, the acquirer must recognize it in the profit and loss statement at the acquisition day.

Anyway, the accounting treatment of goodwill evolved significantly during the years. The goodwill recognition, initially, depended by the accounting method chosen for business combination: the pooling of interest method or the purchase method. When companies were applying the pooling of interest method to account for a business combination the goodwill was not recognized. In that case, the difference between the amount of the purchase price and the share capital was adjusted with reserves. With the purchase method application, instead, the goodwill was recognized and amortized according to its useful life. The IAS 22 Business combination, of 1983, established that the maximum period in which to amortize goodwill should not exceed 5 years. The exception was provided when the value of the goodwill was connected to another asset, that had a useful life longer than 5 years. Successively, with the amendment at the IAS 22 in 1998, it was considered that the useful life of the goodwill cannot exceed 20 years. In any case, it was provided that if the acquirer was able to present evidence that the useful life should be longer than 20 years, the goodwill, apart to be amortized, had also to be impaired annually. Additionally, the standard required to disclose the assumption from which according to the acquirer the goodwill has a longer useful life than 20 years.

When the IFRS 3 substituted the IAS 22 in 2004, the standard setters decided that the goodwill should not be amortized anymore, but only impaired. The main reason was that the useful life of goodwill is subjectively arbitrary and difficult to establish\textsuperscript{152}. A consequence of the shift from amortization to impairment is that with the impairment testing is likely a greater volatility in financial results than it was with the amortization of goodwill\textsuperscript{153}.

### 2.1.3 Required disclosures by IFRS 3 (R)

The disclosure requirements under IFRS 3 on the business combination are quite extensive. The standard is requiring to disclose on the annual report:

- each material business combination that occurred during the year;
- the individually immaterial business combinations which combined are collectively material (with disclosures on an aggregate basis); and
- the business combination that occurred after the end of the reporting period, but before the financial statements are authorized to be issued\textsuperscript{154}.

For the material business combination, the information must be disclosed individually for each deal. So, the concept of materiality in this case is fundamental. The standard setters, in the Conceptual Framework, provide an explanation of what is materiality: “information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity”\textsuperscript{155}. According to this definition, the materiality is entity-specific and depends on the nature and magnitude of the item on which the information has to be disclosed. It is not possible for the standard setters to introduce a common threshold for materiality or determine in advance what will be material. So, the management should judge and indicate which business combinations are material, and which are not.

For the aim of this thesis, the disclosures required on goodwill are among the most relevant. Indeed, the standard is requiring to make “a qualitative description of the factors that make up the goodwill recognised, such as expected synergies from combining operations of the acquiree and the acquirer, intangible assets that do not qualify for separate recognition or other factors”\textsuperscript{156}. As the standard specifies, in describing the factors that are part of the goodwill, the

\textsuperscript{153} Brand Finance Institute, “Global Intangible Finance Tracker 2017: An annual review of the world’s intangible value”, pp 4, (June 2017)
\textsuperscript{154} Grant Thornton, “Navigating the accounting for business combinations – Applying IFRS 3 in practice” pp 74, (December 2011)
\textsuperscript{156} International Financial Reporting Standard 3, B64, (2008)
acquirer has to describe each intangible item that was recognized in the goodwill and the reasons why it was not possible to measure it in a reliable way at fair value\textsuperscript{157}.

This requirement is particularly important since it became mandatory to recognize the intangible assets that are separable. Moreover, the acquirer has also to disclose the fair value of the consideration transferred for the transaction and its allocation among tangible assets, intangible assets and goodwill, allowing to the users of the financial statements to evaluate the deal. The aim of the standard setter in introducing these disclosure requirements was to provide useful information to investors, creditors, and others in evaluating the financial effects of the business combination\textsuperscript{158}. In particular, the standard setters wanted to avoid that the acquirer recognizes a high amount of goodwill without providing an adequate amount of information to the users.

Also in case of a gain from the bargaining power the acquirer must disclose the amount of any gain recognised, the line item in the statement of comprehensive income in which the gain is recognised, and a description of the reasons why the transaction resulted in a gain\textsuperscript{159}.

So, the IFRS 3 (R) requires a certain level of disclosure, but it also specifies that the disclosures should not be limited to what is required by the standard. If additional information would help the financial statement users’ to better understand the effects of the transaction, that information should be provided by the management\textsuperscript{160}.

2.2 Market participants’ feedback on IFRS 3 (R) requirements

The aim of the IASB, considering the requirements provided in IFRS 3 on the intangible assets and goodwill, was to increase relevance, reliability and comparability of the information disclosed by the entities during a business combination. At this point the question is: what do users think about the IFRS 3 (R)?

Masadeh, Mansour, and Al Salamat conducted a research on 300 articles in journals, periodical, books and internet to assess the feedback and the effects of the IFRS 3. They deducted that the main success of this standard was the increased comparability on the international level, especially on the recognition criteria for goodwill. Instead, the main issues found was the

\textsuperscript{159} International Financial Reporting Standard 3, B64, (2008)
\textsuperscript{160} Grant Thornton, “Navigating the accounting for business combinations – Applying IFRS 3 in practice”, pp 74, (December 2011)
increased cost of compliance and preparation of the financial information, especially when the IFRS standards are applied in the developing countries.\(^{161}\)

The opinion of the investors was investigated by the IASB in the Report and Feedback on the Post-Implementation Review on Business Combination. Some of the investors are of the opinion that the current requirement of non-amortization of goodwill is adequate because it helps them to:

- verify if the acquisition is working how they expected;
- to assess the management;
- to relate the price paid to what was bought; and
- to calculate the return on invested capital.

A second group, instead, would prefer the re-introduction of the amortization of goodwill because they sustain that:

- the goodwill acquired in a business combination is supported and successively replaced by internally-generated goodwill;
- estimating the useful life of goodwill is possible, and according to them, it is not more difficult than estimating the useful life of other intangible assets;
- given that the acquirer had paid for goodwill, it should have an impact on the income statement sooner or later;
- the amortization model would create less volatility on the income statement that the impairment model of goodwill;
- amortizing goodwill would reduce the need to recognize the separable intangible assets because both, the goodwill and the identified intangible assets, would be amortized.\(^{162}\)

The supporters of the re-introduction of the amortization model for the goodwill are also underlining the high discretion of the managers in recognizing the impairment losses. Moreover, according to them, the impairment test on goodwill, which must be performed at least annually, is expensive, complex, time-consuming and involve significant judgement if compared with the amortization.\(^{163}\)


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So, the IASB considers the issue of the goodwill of high significance and recognize the existing support for the return to the amortization model, but, at the same time, sustains that the results of the academic literature uphold the value-relevance of the impairment-only approach\textsuperscript{164}.

Another difference of opinion identified by the IASB regard the current recognition criteria of intangible assets. Some investors sustain that the current recognition criteria of the intangible assets are useful because these criteria provide the market participants with insights on why one company is buying another, and which are the components of the acquired entity. Some other investors, instead, criticize the current practice of recognizing additional intangibles as brands, customer relationship, and so on, separately from goodwill, because they sustain that this is “highly subjective and open to significant arbitrage opportunities for companies during business combinations”\textsuperscript{165}. Indeed, they sustain that these intangibles must be recognized separately only if a market exists for them, otherwise it is not possible to measure their fair value reliably.

From the companies’ point of view, during a business combination, the identification and valuation process of the intangible assets represent a complex and costly challenge for the acquirer as well as for the target. Their detection is a difficult task and will depend on the context of the acquisition as well as on the industry. For instance, according to a research performed by KMPG, the most significant intangibles identified are usually the value drivers of the industry\textsuperscript{166}. Grant Thornton identified some possible sources to be checked to identify the intangible assets (figure 7).


Once identified, the intangible assets must be measured at fair value. The standards are requiring to use, in decrescent order of preference, the following approaches: market-price oriented approach, income-oriented approach and cost-oriented approach.

Due to the particular characteristics of intangible assets in many cases, it does not exist an active market that allows inferring their value, even if this would be the preferable solution. Under the income-oriented approach, the value of an intangible asset is calculated by discounting the future cash flow it will generate, and which will accrue to the acquirer during the useful life of that asset. This is the most commonly used valuation method. The cost-oriented approach, instead, is hardly used to value intangible assets. The reason is that under this approach the fair value of an asset is determined by estimating its cost of replacement or its current cost of purchase, without considering the future economic benefits arising from it.

In any case, the fair value determination will rely on different assumptions and forecast data that introduce subjectivity into the valuation process\(^\text{167}\). This may provide the possibility for the acquirer to allocate a high percentage of the acquisition price to goodwill instead that to the intangible assets, avoiding in this way high amortization expenses. Indeed, according to a research of EY, the companies tend to provide little communication on the valuation

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methodologies and the parameters used in valuing the intangible assets\textsuperscript{168}. So, it becomes questionable if the fair value amounts for the intangible assets indicated on the balance sheet, after a business combination, reflect the reality of the transaction.

The amount of the purchase price allocated to goodwill is a significant issue too. According to a survey of KPMG, also the amount of goodwill recognised in a transaction depends on the characteristics of the industry\textsuperscript{169}. The goodwill, as already underlined, represents intangible resources which cannot be separated or overoptimistic expectations on the future value of the target and of synergies it will create. For the last option exist the risk of paying an excessive bid premium and a significant risk that the goodwill will be subject to a future impairment, especially in case of an economic downturn. As already said, some acquirers may be motivated to recognize few intangibles and a high goodwill. But a high goodwill figure may create the impression that the acquirer overpaid for the target or it may raise the question whether the IFRS 3 was applied correctly. For this reason, the acquirers can be sure that the recognized goodwill will be highly scrutinized by investors, analysts and regulators\textsuperscript{170}.

Earnest and Young, in performing a global survey on the purchase price allocation practices, was interested in which are the intangible resources that the companies consider as not separable\textsuperscript{171}. According to the survey, when the companies describe which are the intangible resources they were not able to separate and that they included in the goodwill, four classes were identified: synergies, growth prospects, know-how and organizational model. The elements of each class are listed in figure 8.

\textsuperscript{168} Ernst & Young, “Acquisition Accounting – What’s next for you? A global survey of purchase price allocation practices”, (February 2009)
\textsuperscript{170} Grant Thornton, “Intangible assets in a business combination: Identifying and valuing intangibles under IFRS 3”, (November 2013)
\textsuperscript{171} Ernst & Young, “Acquisition Accounting – What’s next for you? A global survey of purchase price allocation practices”, (February 2009)
So, to summarize, the preparers of the financial statement have identified the following issues in recognizing and valuing the intangibles:

- many of them are not often traded on a stand-alone basis and so usually it does not exist an active market;
- many of them are unique, so it is difficult to identify and assess their value;
- their valuation methods are complex and subjective;
- the measurement of the those which are not based on legally enforceable rights is even more complex; and
- the useful life of some of them is subjective\textsuperscript{172}.

2.3 Empirical results of the effects of IFRS 3 (R) on intangible assets and goodwill

As it was possible to understand by the current discipline on intangible assets and on business combination, a business combination represents, in many cases, the first moment in which intangibles as brands, patents or customer relationships, are recognized. Indeed, these types of intangibles are not recognized on the balance sheet of the acquiree if they were internally generated because it is not allowed by the IAS 38. Some authors and researchers are criticizing this difference in the accounting treatment. Baruch Lev underlines the unfair treatment in expensing most of the internally generated intangible assets and capitalizing the same assets if acquired. According to him, the acquired intangibles, as well as the ones internally developed, can fail. He believes also that the cost of the intangible assets internally generated can be deducted as in an arms-length transaction, in particular from “scientists’ salaries for R&D, or advertising outlays for brands”\textsuperscript{173}.

The difference of accounting between the internally generated intangibles and the acquired ones may impact also the innovation decisions of managers. Indeed, the desire of reporting higher earnings will lead managers to prefer acquisition, instead of internally generated assets, especially in the early stage of a company, even if this may be the wrong strategy in the long-term\textsuperscript{174}. The difference between the internally generated intangibles and the acquired ones affects the comparison between the companies, because affects ratios as ROE, ROA, as well as financial statements line items’ as equity, assets, R&D, earnings. Lev states that “accounting rule make it impossible to compare profitability of companies within a sector having different innovation strategies: developing internally vs. buying intangibles”\textsuperscript{175}. So, he is highly sceptical about the current financial reporting in general, which should be useful to the capital providers to assess the potential return on investment opportunities, as well as to the managers to assess the decisions on mergers and acquisitions.

At the same time, the accounting standard setters (IASB and FASB) believe that they are already providing the necessary information to the financial statement users’ by requiring to companies to disclose the purchase price allocation of the business combinations and also to

recognize the intangible assets separately from the residual goodwill. In this way it is possible for the market participants to assess the amount, the risk and the timing of the future cash flow as well as the possibility to compare the financial statements internationally\textsuperscript{176}.

However, even if the IFRS are applicable in around 130 countries, according to a research conducted by Schmidt, Street and Vogel, their application depends by company-specific and country-specific factors, which play an important role in the level of compliance\textsuperscript{177}. The company-specific factors identified by the researchers are: prior experience with IFRS, the existence of audit committees, type of auditor, ownership structure, and so on. While the country-specific factors are the size of the national stock market and the strength of the enforcement system\textsuperscript{178}.

When the IFRS become compulsory in 2005 in the European countries, analysing the compliance with the disclosures required by the IFRS 3, they found out substantial non-compliance because the “reporting practices continue to differ systematically across Europe despite the adoption of IFRS”\textsuperscript{179}. According to Ball, this is the “Achilles Heel” of IFRS and, his major concern is that “investors will be mislead into believing that there is more uniformity in practice than actually is the case”\textsuperscript{180}. This is an important issue to keep in mind when considering the results of different research papers, but it should not stop the analysis of the topic.

Actually, it is interesting to understand in general the impact of the IFRS 3, and of the ASC 805 given the similarity, on the disclosure requirements on business combinations, as the purchase price allocation, the intangible assets recognition, the disclosure and the treatment of goodwill components’.

When the International Accounting Standards became compulsory in most of the European countries, the researchers Sahut, Boulerne, and Teulon were interested in the impact on the treatment and disclosure of intangible assets and goodwill, passing from the national GAAPs of the different countries to the IAS/IFRS. They performed a research on 1.855 European


\textsuperscript{177} Gluam, M., Schmidt, O., Street, D. L., and Vogel, S., “Compliance with IFRS 3- and IAS 36-required disclosures across 17 European countries: company and country-level determinants”, Accounting and Business Research 43, Number 3, (November 2013)

\textsuperscript{178} Gluam, M., Schmidt, O., Street, D. L., and Vogel, S., “Compliance with IFRS 3- and IAS 36-required disclosures across 17 European countries: company and country-level determinants”, Accounting and Business Research 43, Number 3, pp 171-174, (November 2013)

\textsuperscript{179} Gluam, M., Schmidt, O., Street, D. L., and Vogel, S., “Compliance with IFRS 3- and IAS 36-required disclosures across 17 European countries: company and country-level determinants”, Accounting and Business Research 43, Number 3, pp 164, (November 2013)

companies on the degree of relevance of the accounting data on intangible assets and goodwill from 2002 to 2007\textsuperscript{181}. The research found out that many companies reclassified some intangible assets under goodwill because they didn’t meet anymore the recognition criteria under IAS 38. At the same time, anyway, many entities had the possibility to revaluate some of their intangibles. Passing from the national GAAPs to IFRS made the information provided on the intangibles more reliable, apart from Italian and Finnish companies. Moreover, they found out that the information provided on the intangible assets were more relevant than the information on goodwill for the investors, and the reason was the tough criteria for registering the intangible assets under IAS 38 and IFRS 3. So, according to the results of this research, the investors pay less attention to goodwill than to the intangible assets also because the goodwill is perceived as an “rent-generating asset”, again except in Italy and Finland.

Kimbrough, instead, tried to analyse the reaction of the investors following the disclosure of purchase price allocation, in particular on the intangible assets and goodwill. The research was performed on 1999 US business combination performed between January 1997 and December 2005. He found out that the investors tend to react positively when a high level of the purchase price is allocated to intangible assets. The opposite is true too, the investors tend to react negatively when a high amount of the acquisition price is allocated to goodwill. He justifies the reaction of the investors by stating that the goodwill is composed by several elements (the target’s going concern goodwill, unrecognized intangible resources, external synergies) that are hard to be identified and valued, and consequently the goodwill is less informative to the market participants than the separately identified intangible assets\textsuperscript{182}.

An additional research on the reaction of the market participants depending on the disclosure of intangible assets and goodwill was performed by Anne Jeny, Luc Paugam and Pierre Astolfi. The question they tried to answer to was if more disclosure and a greater recognition of intangible assets during the business combinations would provide relevant information to investors\textsuperscript{183}. To perform the research, they took in consideration the recognition and the disclosure of intangibles during business combinations, using a sample of 447 material US acquisition performed between 2002 and 2011. They documented that the level of disclosure on intangible assets of the acquirer is positively correlated with the magnitude of analyst’ revision of earnings forecast. This correlation is even stronger when the deal was seen initially

\begin{itemize}
  \item \textsuperscript{181} Sahut, J., Boulérne, and S., Teulon, F., "Do IFRS provide better information about intangibles in Europe?", Review of Accounting and Finance, Volume 10, Number 3, pp 285, (2011)
  \item \textsuperscript{182} Kimbrough, M.D., “Do investors rely on purchase price allocation disclosures?”, Harvard Business School, (May 2007)
  \item \textsuperscript{183} Jeny, A., Paugam, L., and Astolfi, P., “Disclosure and Recognition of Intangible Assets: Insights from Purchase Price Allocations”, ResearchGate, pp 5, (May 2016)
\end{itemize}
as negative by the market participants, so when it was labelled as “Bad Deal” (the share price of the purchaser decreased when the deal is announced the first time). They also analysed the impact of the portion of the purchase price allocated to goodwill and consequent reaction of the market participants. When a high portion of the purchase price was allocated to goodwill, the analysts downward the earning forecast causing a negative reaction of investors.

So, from the research performed it was found that larger allocation of acquisition price to goodwill is strongly associated with the Bad Deals. The researchers demonstrate in this way that “acquired goodwill and separately identified intangible assets are both value relevant”. They underlined also that their research supports the request for greater disclosure on intangibles and even a more complete recognition.

In the meantime, some authors sustain that the information disclosed on the intangible assets, separately from goodwill, during the business combinations, has just a limited relevance for the market participants. For instance, Stephen Penman is of the opinion that the wealth generated by the intangible assets pass through the income statement, which allows to investors to deduct the contribution of the intangibles to the firm value. So, the income statement is correcting the deficiencies of the balance sheet.

In particular, Kanodia sustains that the recognition of intangible assets should be enforced only when that assets represent a consistent part of the capital of a company and when it is possible to measure them with a sufficient degree of accuracy. This was consistent with the first version of IFRS 3, which were requiring to recognize the intangible assets only if their fair value could be measured in a reliable way. It is not anymore required under the IFRS 3 (R) because the standard setters have assumed that all the intangible assets that are identifiable during a business combination can be reliably measured.

An additional problem in the current accounting treatment of intangibles and goodwill was identified in the research performed by Johansen and Plenbor. They found out that the disclosures, required in the area of the business combinations, are both costly and complex, and have among the less favourable cost-satisfaction score in the most demanded disclosure items

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186 Penman, S. H., “Accounting for Intangible Assets: There is Also an Income Statement”, Abacus, 45(3), (2009)
in the annual report\textsuperscript{188}. In other words, it means that this information is very important for the users, is very expensive for the manager to provide, and, anyway, does not satisfy the users demand.

Other authors focused their research on the allocation of the purchase price to goodwill. Ron Shalev, Ivy Xiying Zhang, and Yong Zhang decided to investigate if the CEO compensation has any impact on the price allocation during the business combinations. As the standards established, the acquisition price must be allocated to the identifiable tangible and intangible assets and liabilities, according to their fair value. The remaining part of the purchase price will be allocated to goodwill. Considering that for many assets and liabilities it does not exist an active market, their fair value must be estimated by managers, who, in this case, may have a substantial discretion and incentives to manipulate the purchase price that is attributed to goodwill\textsuperscript{189}.

The sample on which the research was conducted took in consideration 775 US business combination, performed during July 2001 and December 2008, and in which both, the acquirer and the acquiree, were publicly traded before the deal. The study tried to investigate how managers’ compensation incentives, in particular the bonuses related to the reported earnings, affected the price allocation after the acquisition.

Given that most of the identifiable assets are amortized, they reduce the reported earnings for the duration of their useful life, while goodwill is only impaired and does not impact annually on the reported earnings. The impact of the goodwill will be recognized only in case of impairment losses. But according to many authors, performing the impairment test oblige the managers to make choices on numerous parameters, and create the possibility to manipulate and to delay the recognition of the impairment losses\textsuperscript{190}. So, according to the authors of this research, reporting higher goodwill probably leads to the recognition of higher post-acquisition earnings, which would guarantee higher bonus compensation to the CEOs.

The results of the research indicate that the amount of acquisition price allocated to goodwill depends mainly on economic determinants, as R&D expenditure of the target, its advertisement expenditures, its recognized goodwill before the acquisition, and so on. But the authors found out that also the importance of the bonuses based on earnings reported in the CEO’s pay package may impact the amount allocated to goodwill, causing its overstatement. They noticed

\begin{footnotesize}
\begin{enumerate}
\item[190] Sahut, J., Boulerne, S., and Teulon, F., ”Do IFRS provide better information about intangibles in Europe?”, Review of Accounting and Finance, Volume 10, Number 3, pp. 271, (2011)
\end{enumerate}
\end{footnotesize}
also that the issue regarding the overstatement of the goodwill diminishes when other elements are used to measure the bonuses of the CEOs, as the cash flows, the sales, or the earnings growth\textsuperscript{191}.

This is true not only for the American managers. Dominic Detzen and Henning Zülch demonstrate that the European managers behave in the same way. The authors used a sample of 123 business combinations performed by companies of Stoxx Europe 600 between 2005 and 2008\textsuperscript{192}. They found out that managers tend to recognize more goodwill if their compensation package depends more on short-term bonuses. In particular, this relation existed when the bonus of the manager was between 150\% and 200\% of the CEOs base salaries. When the bonuses of the CEOs were above 200\% of their base salaries, the researchers didn’t find significant relationship between the bonuses and the goodwill recognized during the business combination.

The relevance of the goodwill is underlined also in other research papers. Indeed, Luc Paugam, Pierre Astolfi, and Olivier Ramond conducted a research, on 308 economically significant US business combinations performed during 2002 and 2011, on the relevance of information that the investors get from the Abnormal Goodwill. The Abnormal Goodwill is the difference between the actual goodwill paid by the acquirer and the Expected Goodwill, based on the investors’ expectation, after the first announcement of the deal\textsuperscript{193}. According to the results of the research, the investors are reacting negatively to the Abnormal Goodwill. From this, the authors deduced that the information on the amount of the purchase price allocated to goodwill is useful for the stock valuation. But differently from the research of Ron Shalev, Ivy Xiying Zhang, and Yong, nominated above, the investors tend to attribute the Abnormal Goodwill to overpayment, more than to overallocation of goodwill made by the managers.

Moreover, according to the researchers, the Abnormal Goodwill provides useful information also about the quality of the transaction. Indeed, they found out that “the frequency and magnitude of future goodwill impairment increases as Abnormal Goodwill increases, and that the change in future ROA decreases as Abnormal Goodwill increases”\textsuperscript{194}. So, with these results, the authors provided useful insight to the standard setters on how informative is the disclosure requirement about the purchase price allocation. In particular, they identified:


- which type of information the Abnormal Goodwill provides;
- that the level of goodwill resulting from the purchase price allocation informs about the quality of the deal; and
- the level of goodwill is also an early indicator of the future impairment and of the change in the performance.

So, to summarize, from most of the researches briefly illustrated above, it results that the information required by the IFRS 3 (R) on the intangible assets and goodwill is relevant and useful to the market participants. At this point the question is: which is the level of compliance of companies with the standard requirements’? The aim of the next chapter is to identify it for the Italian listed companies.
Chapter 3: The empirical analysis on the Italian companies

In the last chapter, it was discussed the importance for the market participants of the information required by the IFRS 3 (R) on the business combinations performed by the companies. In particular, the focus of this thesis is on the relevance, that the information provided on goodwill and intangible assets, has on the decisions of financial statement users’.

So, to conclude the thesis, an empirical research was performed to determine the level of compliance of the Italian listed companies with the required disclosures on goodwill and intangible assets as provided by the IFRS 3 (R). The level of compliance is important to understand if the users of the financial statements obtained the expected information, and consequently the benefits arising from the disclosure.

The decision to analyse only the Italian listed companies, depends on the fact that even if the IFRS 3 (R) is a standard applied in more than 150 countries, as Erkens’ study demonstrates, a single set of accounting standards per se is not sufficient to guarantee an equal level of disclosure around the countries where its application is compulsory. Factors as managerial incentives, markets’ demand for information, the cultural values, the country’s institutional environment and its strength of enforcement affect the companies’ final disclosures. According to the author, the accounting harmonization will not be reached since it will not be achieved the harmonization of the enforcement and the alignment of disclosure incentives across the different countries and the different firms\(^\text{195}\).

3.1 The research methodology

The research was performed on the 100 most capitalized Italian companies listed on Borsa Italiana at the end of each year from 2009 to 2015. These companies have been chosen because of their visibility and because they represent more than 80% of the capitalization of the Italian listed market\(^\text{196}\). These companies were identified on the list of public companies provided by the daily newspaper “Il Sole 24 Ore” at the end of each year. From these 100 companies


\(^{196}\) Borsa Italiana, “SOTTO LA LENTE: LA REVISIONE PERIODICA DEL PANIERE FTSE MIB”, http://www.borsaitaliana.it/notizie/sotto-la-lente/revisione-periodica-paniere-ftse-mib149.htm (last access on 15/01/18)
anyway, the financial ones were excluded. The exclusion depended by the different regulatory burden on their financial statements and the higher compliance requested.

The time framework analysed started with 2009, the year when the IFRS 3 (R) became compulsory, and finished with 2015. The research was terminated with the year 2015 because the standard provides the possibility for the companies to provide the definitive data on any business combination performed during the year within the next 12 months, so in the annual report of the following year. For instance, in case of a business combination performed in 2016, it would be possible to find the definitive data in the annual report of 2017, not still available.

The research was performed collecting and analysing 507 annual reports of the companies, from 2009 to 2015. All the reports were obtained using the official websites of the companies or the documents deposited on the website of Borsa Italiana. The aim was to identify the business combinations performed and the level of compliance with the main requirements of the IFRS 3 (R) regarding the goodwill and intangible assets. The data were collected from the notes provided in the annual report on the business combination performed during that period.

To evaluate the level of compliance for each business combination it was used the paragraph B64 of the IFRS 3 (R). This paragraph lists the compulsory information to be disclosed in the notes of the annual report for each business combination performed by the company. The requirements considered appropriate to evaluate the level of compliance with the qualitative description of goodwill and with the recognition of intangible assets were four: point (e), (f), (i) and (n) of the paragraph B64 of the IFRS 3 (R).

After some general information required by the paragraph B64 as the name of the acquired business, the reasons of the acquisitions, the date, the voting rights and so on, which are not considered relevant for the aim of this thesis, at the point (e) the standard requires a description of the identified goodwill, in particular “a qualitative description of the factors that make up the goodwill recognised, such as expected synergies from combining operations of the acquiree and the acquirer, intangible assets that do not qualify for separate recognition or other factors”\(^\text{197}\). With this requirement, the standard setters underline the importance they attribute to the goodwill, to its elements, and to its evaluation. They do not consider the goodwill only as an accounting difference among the consideration transferred and the fair value of the net assets acquired. With the requirement to recognize also any factor that makes up the goodwill and the intangible resources that cannot be evaluated separately, the standard setters are promoting the approach of minimizing the amount recognized as acquired goodwill through the

\(^{197}\) International Financial Reporting Standard 3, B64 (2008)
allocation to identifiable assets of the purchase price\textsuperscript{198}. The reason is the complex nature of goodwill and of the economic benefits that it represents. In any case, the final aim of the standard setters is to increase the quality of the financial reporting for the market participants, even if this poses some difficulties to the accountants\textsuperscript{199}.

The successive point of the B64 taken in consideration was paragraph (f), which requires the disclosure of “the acquisition-date fair value of the total consideration transferred”\textsuperscript{200}. This element is relevant for the aim of the research because it allows to the market participants to evaluate the business combination, especially in relation with the acquired assets (tangible and intangibles) and the amount paid for goodwill.

The next provision analysed was the point (i) of B64 that requires to disclose “the amounts recognised as of the acquisition date for each major class of assets acquired and liabilities assumed”\textsuperscript{201}. With this provision, the standard setters are requiring to the acquirers to perform a purchase price allocation. Moreover, this requirement provides for the recognition of any intangible asset that may not be recognized in the acquiree’s balance sheet, but which respects the criteria for the separate identification. Fulfilling this request is relevant for the market participants because it allows them to evaluate the business combination, and in particular, to evaluate the price paid for the transaction in relation to the assets acquired and the liabilities assumed.

The last disclosure requirement considered relevant for this thesis regards the recognition of a bargain power or badwill, instead of goodwill. At the point (n) of B64 the standard setters are providing that in case of a bargain purchase it should be disclosed:

- the amount of any gain recognised in accordance with paragraph 34 and the line item in the statement of comprehensive income in which the gain is recognised; and
- a description of the reasons why the transaction resulted in a gain\textsuperscript{202}.

As it is required a qualitative description of goodwill, it is also required an explanation of the reasons why it was paid less than the fair value of the net assets acquired for a business combination. Before providing this explanation, anyway, the standard is requiring to perform a

\textsuperscript{198} Marton, J., “Comment Letter on The Exposure Draft of Proposed Amendments to Ifrs 3 Business Combinations”, European Accounting Association, pp 2(17).
\textsuperscript{199} Marton, J., “Comment Letter on The Exposure Draft of Proposed Amendments to Ifrs 3 Business Combinations”, European Accounting Association, pp 3.
\textsuperscript{200} International Financial Reporting Standard 3, B64 (2008)
\textsuperscript{201} International Financial Reporting Standard 3, B64 (2008)
\textsuperscript{202} International Financial Reporting Standard 3, B64 (2008)
reassessment of the purchase price allocation in order to make sure that the acquirer has correctly identified all assets and liabilities acquired.

Before analysing the results of the research, it is necessary to underline that, as already mentioned, the IFRS 3 (R) requires information to be disclosed individually for the material business combinations and, allows information to be provided in aggregate only in case of immaterial business combinations.

So, in order to collect the data, the scheme presented in Appendix A of this thesis was used for each year. In the scheme was indicated the name of each company that performed any business combination and the name of any acquired business if provided. For each business combination identified it was indicated if the acquirer was considering the acquisition material or immaterial, and successively it was verified the compliance, the non-compliance or the non-applicability for each of the four requirements of paragraph B64 of IFRS 3 (R) described above.

3.2 The performance of the Italian companies

So, the companies subject to the research were the ones which meet the following criteria:

- carried out business combination between 2009 and 2015;
- there was a transfer of control in the transaction involved; and
- the companies played the role of the acquirer in the deal.

The number of non-financial companies analysed for each year varied, as it is possible to see from the first row of table 1. This fluctuation is given to the fact that each year the composition of the 100 most capitalized Italian companies change, and also the number of financial and non-financial companies changes. But not all the analysed companies performed also business combinations, so, in the second row of the table are indicated the number of the analysed non-financial companies that performed at least one business combination during the year. Also in this case, the number of companies varied during the time framework analysed, from a minimum of 28 companies which performed at least one business combination in 2013 to a maximum of 38 companies in 2009 and 2011.

The number of total business combination identified since 2009 to 2015, material and immaterial, is of 616. While for the material business combinations the IFRS 3 (R) requires the individual disclosure of the information, for the immaterial ones, which are material if considered in aggregate, the standard setters require the disclosure on an aggregate basis. So,
in the next table is possible to see the number of total business combination, but also the number of material and immaterial ones performed in each year.

**Table 1**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of non-financial companies</td>
<td>73</td>
<td>75</td>
<td>74</td>
<td>73</td>
<td>70</td>
<td>71</td>
<td>71</td>
<td>507</td>
</tr>
<tr>
<td>Number of companies performing BC</td>
<td>38</td>
<td>30</td>
<td>38</td>
<td>34</td>
<td>28</td>
<td>30</td>
<td>33</td>
<td>231</td>
</tr>
<tr>
<td>Total BC</td>
<td>79</td>
<td>84</td>
<td>78</td>
<td>60</td>
<td>53</td>
<td>60</td>
<td>202</td>
<td>616</td>
</tr>
<tr>
<td>Number of material BC</td>
<td>53</td>
<td>39</td>
<td>56</td>
<td>49</td>
<td>43</td>
<td>53</td>
<td>55</td>
<td>348</td>
</tr>
<tr>
<td>Number of immaterial BC</td>
<td>26</td>
<td>45</td>
<td>22</td>
<td>11</td>
<td>10</td>
<td>7</td>
<td>147</td>
<td>268</td>
</tr>
</tbody>
</table>

The number of material business combinations, performed by companies, was usually higher than the number of immaterial ones, except for 2010 and 2015. In particular, it has to be underlined that 120 immaterial business combination out of the 147, registered in 2015, were performed by the same company. This indicates also that the immaterial business combinations were usually performed by a low number of companies. For instance, in 2014 two were the companies that performed the seven immaterial business combination, while in 2010 and 2015 six were the companies that performed them. Given that those companies did not explain the reasons why they considered those business combinations immaterial, and that the standard setters do not provide any quantitative indication of which business combination should be considered material or not, it was considered more appropriate to focus the analysis on the material ones. So, in the next pages, when referring to the business combination it would refer to the material ones, if not otherwise underlined.

The data collected were summarized in the next tables. In most of the tables, it is indicated the number of total business combinations or the number of companies compliant or non-compliant with a certain requirement in relation to the total business combinations or in relation to the total companies. Usually, in the last row of the table is indicated for each year the percentage of compliance or non-compliance. The last column, instead, is providing an average of the compliance or non-compliance of the analysed time framework.

The way in which the companies disclosed the information about business combinations varied from company to company. Some of them were providing each year in the financial statement
a specific note about business combinations. If one or more business combinations were performed during the year, the companies disclosed in that note the information required, if no business combination were performed, there was a clear statement. The disclosure of the information in this way was efficient and effective in fulfilling the requirements of IFRS 3 (R). However, most of the companies disclosed the information on business combination in the notes describing the change in the consolidation scope of the company. And the remaining ones were disclosing the information on the business combinations in many different notes of the financial statement. For instance, the goodwill recognized with the business combination were disclosed in the note about the total goodwill of the company, the non-current assets identified and acquired through the business combination, were disclosed in the note on the total non-current assets. So, these companies were providing fragmented information which made it difficult the collection of the data.

The first point from which it is interesting to begin the analysis is the disclosure or less of the fair value of the consideration transferred for the business combination. The price paid for an acquisition is the first element from which the market participants will evaluate the deal. They will analyse the price paid in relation to the business acquired, but also in relation to the financial possibilities of the acquirer. The purchase price is relevant for this research, because it allows to the market participants to evaluate it in relation to the amount of intangible assets recognized, and in relation to the goodwill paid.

In the IFRS 3 (R) the standard setters require for the disclosure of the amount paid for the business, the fair value of all the interests that the acquirer may have held previously in the acquired business and the fair value of any earn-out that the parts may agree. As it is possible to see from the next table, the level of non-compliance with the disclosure of the purchase price is low. It is not possible from the notes provided in the annual report of the non-compliant companies to deduct the reasons for the non-compliance. The main motivations may be the unwillingness to provide this information to the market, or not considering it relevant for the market.

<table>
<thead>
<tr>
<th>Table 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
</tr>
<tr>
<td>Number of material BC</td>
</tr>
<tr>
<td>BC non-compliant with the purchase price disclosure</td>
</tr>
<tr>
<td>% of BC non-compliant</td>
</tr>
</tbody>
</table>

It is important to notice that, for example, of the 4 cases of non-compliance in 2011, 3 were business combination performed by the same company. The 10 cases of non-compliance in 2015 depend by 5 companies which did not disclose the consideration transferred. Indeed, the percentage of non-compliance, in the years with 3 or more business combinations non-compliant with the disclosure of the purchase price (2011, 2013, 2015), would be lower if it would be considered the number of companies not compliant with this requirement, as it is possible to see from the next table.

Table 3

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies performing BC</td>
<td>38</td>
<td>30</td>
<td>38</td>
<td>34</td>
<td>28</td>
<td>30</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Companies non-compliant with the purchase price disclosure</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>% of Companies non-compliant</td>
<td>5,3%</td>
<td>0,0%</td>
<td>5,3%</td>
<td>2,9%</td>
<td>3,6%</td>
<td>6,7%</td>
<td>15,2%</td>
<td>5,6%</td>
</tr>
</tbody>
</table>

Even if the level of compliance of the Italian companies with the disclosure of the purchase price can be considered high (except for 2015), it is important to underline that the disclosure of this element does not provide enough information on the business combination to the market participants to evaluate the transaction and does not satisfy alone the objective of the standard setters. Indeed, the disclosure of the purchase price gains importance when it is followed by its allocation among the major classes of assets acquired and liabilities assumed. As Degenhardt states: with the purchase price allocation “the acquirer demonstrates to what extent a premium paid on top of the target’s net book value is covered by the target’s identifiable assets”\(^\text{204}\). The purchase price usually differs from the target’s net assets for two reasons:

- because of the difference existing among the historical cost of the assets and their fair value; and
- because of the existence of intangible assets not recognized in the acquiree’s balance sheet.

This is the moment in which the acquirer has the possibility to recognize the intangible assets not identified by the acquiree because internally generated, and it is considered the main challenge of the purchase price allocation. As demonstrated from the researches illustrated in the last chapter, the market participants’ attribute more and more relevance to the recognition

of intangible assets. The identification of internally generated intangible assets justifies at the eyes of the investors the price paid and impact the analysts’ recommendations.

So, the second aspect to be considered is the compliance with the disclosure of the amounts of the main classes of assets acquired and liabilities assumed. Without this information, the investors will not be able to understand the transaction, and especially if the price paid is reasonable for the business acquired.

The level of non-compliance of the Italian listed companies with the disclosure of the purchase price allocation for each material business combination is illustrated in the next table.

**Table 4**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material BC</td>
<td>53</td>
<td>39</td>
<td>56</td>
<td>49</td>
<td>43</td>
<td>53</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>BC non-compliant with the purchase price allocation</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>% of BC non-compliant</td>
<td>11,3%</td>
<td>7,7%</td>
<td>21,4%</td>
<td>8,2%</td>
<td>20,9%</td>
<td>13,2%</td>
<td>25,5%</td>
<td>15,5%</td>
</tr>
</tbody>
</table>

As it is possible to see, the number of cases of non-compliance with the purchase price allocation is higher than the number of cases of non-compliance with the disclosure of the purchase price. It means that some companies provided the price paid for a business combination, but they did not disclose what they were buying. The decision of companies to not perform the purchase price allocation may imply that they did not perform a valuation at fair value of the assets acquired and of the liabilities assumed, and that they did not undertake any effort to investigate about the existence of any intangible assets in the business acquired that was not already recognized on the acquiree’s balance sheet.

The percentage of non-compliance vary from 7,7% in 2010 to 25,5% in 2015. It means that in 2015, for one business combination on four, the acquirer did not provide the information required by the standard setters on the items it was buying. On average in these 7 years of application of the IFRS 3 (R), the Italian listed companies, considered in this research, had a non-compliance rate of almost 16%. In any case, the rate of non-compliance does not seem to follow any chronological trend over the years.

The reason of non-compliance may be related, in some cases, to the difficulties to perform the purchase price allocation. Indeed, most of the compliant companies specified that the process of allocation was performed hiring independent experts for the valuation of assets and liabilities.
This solution, anyway, is an expensive one and it can explain the high rate of non-compliance, especially when the acquirer does not consider the business combination so relevant.

Once the process of purchase price allocation is concluded, the companies may have to recognize a goodwill, if the price paid was higher than the value of the net assets acquired, or a bargain gain, when the price paid was lower. In the next table the material business combinations analysed were classified among the ones in which a goodwill was recognized; the ones in which a bargain gain was identified; and the ones that did not result in a goodwill nor in a bargain gain.

**TABLE 5**

<table>
<thead>
<tr>
<th>Years</th>
<th>With goodwill</th>
<th>With “bargain gain”</th>
<th>Without goodwill or “bargain gain”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of BC</td>
<td>%</td>
<td>Number of BC</td>
</tr>
<tr>
<td>2009</td>
<td>46</td>
<td>87%</td>
<td>2</td>
</tr>
<tr>
<td>2010</td>
<td>26</td>
<td>67%</td>
<td>4</td>
</tr>
<tr>
<td>2011</td>
<td>43</td>
<td>77%</td>
<td>4</td>
</tr>
<tr>
<td>2012</td>
<td>36</td>
<td>73%</td>
<td>5</td>
</tr>
<tr>
<td>2013</td>
<td>27</td>
<td>63%</td>
<td>4</td>
</tr>
<tr>
<td>2014</td>
<td>36</td>
<td>68%</td>
<td>3</td>
</tr>
<tr>
<td>2015</td>
<td>38</td>
<td>69%</td>
<td>5</td>
</tr>
<tr>
<td>Average</td>
<td>72%</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

The Italian listed companies recognized a goodwill on average in 72% of the business acquisitions. In around 20% of the cases, the transactions did not result in a goodwill or a bargain gain. A bargain gain was recognized in around 8% of the business combination.

At this point, the aim of the research is to understand if the Italian listed companies, in case of a goodwill or a bargain gain, provide the qualitative description required by the standard. Indeed, the aim of the standard setters was to inform the market participants of the components of goodwill, or in case of a bargain gain of the reasons why it arose.

In the next table, it is illustrated the level of non-compliance of the Italian listed companies with the requirement to disclose the reasons of a bargain gain arising from a business combination.
As it is possible to see in 2009 and 2011, the companies that performed the business combinations in which arose a bargain gain, did not provide any explanation of the reasons. Even if in the other years the level of non-compliance does not reach 100%, it is anyway high, with an average from 2009 to 2015 of almost 80%. The few companies compliant provided explanation for the bargain gain as: cheap acquisition price, the possibility that in the next years the acquired business will suffer operating losses or financial and economic difficulties of the seller.

The standard setters are also requiring for a qualitative description of goodwill, given that they do not consider it as a mere accounting difference between the acquisition price and the fair value of the net assets acquired. In the next table, the level of non-compliance with the qualitative description of the recognized goodwill is illustrated.

On average the level of non-compliance in the time framework analysed was of 83%. For most of the material business combination performed in those years, the companies disregarded the provision of the IFRS 3 (R), which require for the description of the goodwill recognized, a description of its elements and the reasons why those elements could not be recognized individually.

In case of compliance with this requirement, the acquirers most of the times described the goodwill as future synergies that would arise from the business combination. Few companies provided a wider description of the recognized goodwill and of its components. The components identified were: the know-how of the organization; the distribution network; the

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC with bargain gain</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>BC with bargain gain non-compliant</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>% of BC non-compliant</td>
<td>100,0%</td>
<td>75,0%</td>
<td>100,0%</td>
<td>80,0%</td>
<td>75,0%</td>
<td>66,7%</td>
<td>60,0%</td>
<td>79,5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 7</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC with goodwill</td>
<td>46</td>
<td>26</td>
<td>43</td>
<td>36</td>
<td>27</td>
<td>36</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>BC with goodwill disclosure non-compliant</td>
<td>33</td>
<td>24</td>
<td>31</td>
<td>29</td>
<td>24</td>
<td>30</td>
<td>35</td>
<td>29</td>
</tr>
<tr>
<td>% of BC non-compliant</td>
<td>72%</td>
<td>92%</td>
<td>72%</td>
<td>81%</td>
<td>89%</td>
<td>83%</td>
<td>92%</td>
<td>83%</td>
</tr>
</tbody>
</table>
costumers’ portfolio; the access to technology; the cost reduction; the assembled workforce of the seller; the possibility to enter in new markets; the possibility to expand the production in new markets and avoid custom duties; the future economic benefits that cannot be separately measured; and the performance of vertical integration that guarantee the supply of raw materials.

As previously underlined in this thesis, the standard setters require also for the disclosure of the reasons why the items that compose the goodwill could not be recognized individually, but none of the companies analysed disclosed this information.

To conclude the illustration of the data collected, in the next table are indicated the companies that resulted totally compliant with the requirements analysed.

**TABLE 8**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material BC</td>
<td>53</td>
<td>39</td>
<td>56</td>
<td>49</td>
<td>43</td>
<td>53</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>BC totally compliant</td>
<td>16</td>
<td>12</td>
<td>20</td>
<td>16</td>
<td>15</td>
<td>21</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>% of BC compliant</td>
<td>30%</td>
<td>31%</td>
<td>36%</td>
<td>33%</td>
<td>35%</td>
<td>40%</td>
<td>29%</td>
<td>33%</td>
</tr>
</tbody>
</table>

On average for 33% of the material business combination the companies were compliant with the disclosure analysed since 2009 to 2015, with fluctuation between 25% in 2009, to 40% in 2014.

With this research is was examined the level of compliance, of the Italian listed companies, with the disclosure provided by the IFRS 3 (R) on goodwill and intangible assets. Anyway, this information would be more significative if it would be possible to compare the level of compliance of the Italian companies with the level of compliance of the companies operating in other countries where the IAS/IFRS are applicable.

3.3 Comparing the performance of Italian companies with that of international ones

Even if the researches on the importance of recognition of the intangible assets and goodwill abound, most of them address the voluntary disclosure provided by the companies, instead of the mandatory one required by the standard setters. After the introduction of the IFRS 3, Carvalho, Rodrigues, and Ferreira were among the first to perform a research on the level of
compliance of the Portuguese companies with the disclosure requirements on goodwill and intangible assets during the business combinations.

They used a sample of 197 business combinations performed by the Portuguese companies listed on Euronext Lisbon between 2005 and 2009\footnote{Carvalho, C., Rodrigues, A. M., and Ferreira, C., “The Recognition of Goodwill and Other Intangible Assets in Business Combinations – The Portuguese Case”, Australian Accounting Review No. 76 Vol. 26 Issue 1, pp 9 (2016)}. The research was focused on the level of compliance with the disclosure of the purchase price, the purchase price allocation, and the qualitative description of goodwill, as provided by the IFRS 3. Given that the requirements on intangible assets and goodwill did not change significantly with the IFRS 3 (R), the level of compliance of the Italian companies for the year 2009 can be compared with that of the Portuguese companies for the same year.

**Table 9**

<table>
<thead>
<tr>
<th>Year 2009</th>
<th>Italian companies</th>
<th>Portuguese companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of BC non-compliant with purchase price disclosure</td>
<td>5%</td>
<td>65%</td>
</tr>
<tr>
<td>% of BC non-compliant with purchase price allocation disclosure</td>
<td>11%</td>
<td>65%</td>
</tr>
<tr>
<td>% of BC non-compliant with the qualitative description of goodwill</td>
<td>72%</td>
<td>94%</td>
</tr>
</tbody>
</table>

As it is possible to see from the table, the Portuguese companies resulted less compliant that the Italian ones on the requirements analysed.

It is interesting to note that the difference of percentage of non-compliance was high on the disclosure of the purchase price, but it decreased for the next two disclosure requirements considered.

The authors of the research on the Portuguese companies arrived at the conclusion that the failure to disclose the information required was very high in Portugal. In particular, the level of non-compliance with the requirement to disclose the components that form the goodwill reached a rate higher than 90% in all the years of the research\footnote{Carvalho, C., Rodrigues, A. M., and Ferreira, C., “The Recognition of Goodwill and Other Intangible Assets in Business Combinations – The Portuguese Case”, Australian Accounting Review No. 76 Vol. 26 Issue 1, pp 16, (2016)}. The authors linked the high rate of non-compliance of this requirement with the high rate of non-compliance on the purchase price allocation disclosure. Indeed, they stated that the companies did not undertake any effort to identify the individual intangible assets that could be separately reported. So, those assets were recognized in the goodwill. Successively, the companies did not provide any
information on goodwill to hide their non-compliance with the purchase price allocation. This conclusion may not be automatically attributed also to the Italian listed companies, given that their rate of non-compliance with the purchase price allocation is much lower.

Instead, in the few cases of Portuguese companies that provide the qualitative description of goodwill, it was stated “that goodwill corresponds to future economic benefits that the acquirer expects to obtain from the activity of the acquired companies”\textsuperscript{207}. This conclusion is the same indicated previously also for the Italian companies.

A successive research focused on the same disclosure requirements was performed by the Association of Chartered Certified Accountants (ACCA) on the business combinations of 544 non-financial companies selected from EU, Australia, China, Hong Kong, New Zealand, Brazil, South Africa and Malaysia in the financial year 2010/2011. The financial annual reports of 2010 were used for most of the firms, and the ones of 2011 for the companies with the financial year which end between January and June 2010.

The companies selected for the research were part of their countries’ premier stock market indices at 1 June 2011. The aim of the study was to investigate “the accounting for, and information disclosed under, IFRS 3 Business Combinations, IAS 36 Impairment of Assets, and IAS 38 Intangible Assets, and examines compliance levels with the mandated disclosures and their determinants”\textsuperscript{208}. In this way, the research allows to compare the level of compliance of the Italian listed companies with many other countries, applying the IAS/IFRS, on the IFRS 3 (R).

The number of companies, of the ACCA report, which performed at least one business combination in 2010 was 280, which represent 51.5\% of the sample. The sample of the Italian listed companies was composed of 75 non-financial companies, and 30 of them entered in at least one business combination, which represent 40\%.

In analysing the level of compliance with the IFRS 3 (R), the ACCA report underlines that only 27\% of the companies composing the sample, provide individual disclosure for each business combination. The remaining companies were providing the information on an aggregate basis or were not providing any disclosure at all. The Italian companies, instead, provided the information on their business combination on an individual basis in 85\% of the cases.


As explained above, according to the IFRS 3 (R), it is possible to provide aggregated disclosure on business combination only when these transactions are considered immaterial. Given the high number of different countries and companies analysed by the ACCA report, it would be interesting to understand if the concept of “materiality” was applied at the same way, or if cultural and sectorial differences may affect it. This would explain the significant difference between the percentage of Italian companies that considered their business combination material and the international ones of the ACCA research.

According to the research performed by ACCA, 240 of 280 of companies that performed a business combination disclosed the purchase price, so it resulted that 14% of those companies were not compliant. Instead, the Italian ones resulted to be totally compliant on this requirement in 2010.

Anyway, the methodology applied by the ACCA researchers’ and the methodology used to analyse the Italian companies was not exactly the same and this did not allow the comparison on some requirements. For instance, it was not possible to compare the level of compliance on the purchase price allocation because the ACCA report disclosed only the number of companies that had identified any intangible assets during a business combination but did not provide the number of all the companies that performed the purchase price allocation.

Successively, the ACCA was interested to verify if the companies that performed any business combination provided the qualitative description about the goodwill and its components. It resulted that 258 of 280 companies that performed a business combination, recognized a goodwill. On the 258 companies, anyway, only 61 (23,6% of the 258) provided any qualitative description of the goodwill and its elements\textsuperscript{209}.

Instead in 2010, of the 20 Italians companies which performed a business combination and recognized a goodwill, only 2 (10% of 20) provided a qualitative description. So, the Italian companies resulted more non-compliant (90%) on this requirement that the international ones (76,4%).

In any case, an important aspect underlined also in the ACCA report is that, as for the Italian and Portuguese companies in 2009, the qualitative description of goodwill provided by the companies compliant consisted mainly in stating that the goodwill represented future synergies that would arise from the transaction. In particular, the authors of the research stated that the “companies either do not disclose any information or just repeat the wording from the

So, they concluded that even when the companies had tried to be compliant, the requirement was performed in an ambiguous way, far from achieving the true purpose of the standard setters.

Lastly, 12 companies were identified in the ACCA report which recognized a bargain gain instead of goodwill. Of the 12 companies, only 4 described the reasons of the gain. On the same year, 4 of the analysed Italian companies obtained a bargain gain, and only one provide any explanation of the reasons. So, even if not equal, the level of non-compliance was quite similar among the Italian companies and the international ones.

The general conclusion of the ACCA report regarding the disclosure requirements analysed is that it misses a specific guidance on when and how the items should be disclosed. This provokes disparity in the information provided by the different companies on the business combinations, and as consequence lack of comparability.

The last research identified, on the same topic, is the one performed by the European Securities and Markets Authority (ESMA). The report was named “Review on the application of accounting requirements for business combinations in IFRS financial statements” and was issued in June 2014. The research was performed to evaluate “the consistency of application of key requirements of IFRS 3” on a sample of 56 companies on their annual reports in 2012. The aim of this report was to assist the IASB in understanding which areas of the IFRS 3 (R) need additional clarification or guidance in achieving the objectives established by the standard setters.

The 56 listed entities analysed were chosen among 11 jurisdictions of the European Union and the number of material business combination identified and analysed was 66.

One of the first comments of ESMA, performing the research, was that the companies analysed were generally compliant with IFRS 3 (R) requirements, but their understandability was many times impaired because “some disclosures were presented outside the financial statements, for example in the management report, or together with other notes to the accounts”. This, as already stated, was true also for the Italian listed companies subject to the research of this thesis.

The ESMA underlined that even if the IFRS 3 (R) does not provide specifically where in the annual report the information on the business combination should be provided, presenting it in

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a single note would give more accessible information to the financial statement users’ and would increase the comparability among the companies.

On the next table, it is illustrated the level of non-compliance of Italian listed companies and of the companies subject to the ESMA report on the disclosure of the purchase price, purchase price allocation and the qualitative description of goodwill.

<table>
<thead>
<tr>
<th>TABLE 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2012</td>
</tr>
<tr>
<td>% of BC non-compliant disclosure of purchase price</td>
</tr>
<tr>
<td>% of BC non-compliant with purchase price allocation</td>
</tr>
<tr>
<td>% of BC non-compliant with the qualitative description of goodwill</td>
</tr>
</tbody>
</table>

Even if in the ESMA report it is not stated precisely that each company disclosed for each business combination the price paid, it is stated the total amount paid for all the business combinations analysed. In this way, it is possible to conclude that all the companies subject to the research, were compliant with the disclosure of the consideration transferred\(^{213}\). In 2012 on the 49 material business combinations, performed by the Italian listed companies analysed, only one did not disclose the consideration transferred. So, even if the level of compliance of Italian companies is not of 100\%, it is not far from that of the European companies analysed.

The level of non-compliance on the purchase price allocation of the Italian listed companies was in line with that of the European companies, at 8\%. Even if the compliance was at more than 90\% for this requirement, the ESMA was criticizing the way in which some companies complied with it. The authors of the research found out that some companies were aggregating classes of items of different nature, as for example the total liabilities, total non-current assets, and so on. According to the ESMA, this behaviour limits the level of understandability of the information provided\(^{214}\). The report suggests that it would be appropriate to provide a more granular disclosure of the assets and liabilities acquired.

One of the point considered as a “boiler plate” issue by the report was the qualitative description of goodwill. Indeed, in the sample analysed by the ESMA, the companies did not disclose it in

\(^{213}\) ESMA, “Review on the application of accounting requirements for business combinations in IFRS financial statements”, pp 6, (16 June 2014)

\(^{214}\) ESMA, “Review on the application of accounting requirements for business combinations in IFRS financial statements”, pp 9, (16 June 2014)
the 20% of the business combinations with a goodwill. Instead, the level of non-compliance of the Italian listed companies was worse in the same year, arriving at more than 80%.

Anyway, as in the previous two researches, the ESMA was criticizing the compliant companies for describing the goodwill only as future synergies arising from the business combination “without providing details about how those synergies are expected to be achieved”215. So, the ESMA report concluded, about goodwill, that the information was usually missing or, if provided, was insubstantial and was recommending to the companies to disclose how the synergies were determined and how and when are expected to be realized.

To conclude, in 11% of the business combinations, subject to the ESMA research, a bargain gain was identified. As for the goodwill, the disclosure about the reasons why the transaction resulted in a gain is considered a “boiler plate” issue too. Indeed, in 30% of the transaction with a bargain gain, no disclosure was made about the reasons. The Italian listed companies identified a bargain gain in 10% of the business combinations performed. However, the level of non-compliance with the disclosure of the reasons why the business combination resulted in a gain was 80%, higher than that of the companies subject to the ESMA report.

The ESMA was interested to identify the reasons why a business combination may result in a gain for the acquirer. It concluded that the gain may result from a high valuation of the intangible assets identified, that do not have a market where to observe their value, or because of some future restructuring costs in which the acquirer expects to incur216. The reason provided by the only Italian company compliant with this disclosure in 2012, was that the gain arose because the acquisition price was convenient. According to the ESMA, this type of disclosure is insubstantial to the users of the financial statement. Indeed, in the report, it was underlined that the information which would be relevant to the market participants and which would justify a bargain gain should be a description of how the acquirer evaluate the assets and liabilities or any restructuration that the acquirer intends to perform.

3.4 The causes of the non-compliance

From the comparisons performed in the last paragraph, it is possible to conclude that the Italian listed companies were more compliant than the Portuguese ones on each requirement analysed.

Instead, their level of compliance, in respect to the companies’ subject to ACCA and ESMA report, was almost the same on the purchase price and on the purchase price allocation, but worse on the qualitative disclosure of goodwill and on the disclosure of the reasons of a bargain gain.

Anyway, the high level of non-compliance with the goodwill requirement of the Italian listed companies subject to this research may depend, as illustrated also by the ACCA report, by two main reasons:

- the firms do not understand the mandatory requirement of the standard; or
- the firms simply do not follow the standard to the letter.

The possibility that the firms do not understand the requirement of the standard may be confirmed by the fact that the goodwill is still considered by some authors and researchers as a “black box”\(^{217}\). This happens because even if the standard setters provide “a theoretical definition of what goodwill is and instruction on how to account for it, interpretative action can still exist”\(^{218}\). So, in general, it would be possible to attribute the high level of non-compliance to the unclear concept of goodwill. Indeed, this uncertainty makes it difficult for companies to fulfill with the requirement of IFRS 3 (R) of providing a qualitative description of the goodwill recognized in a business combination.

A similar explanation, on the low level of compliance of companies in providing a qualitative description of goodwill, is provided by the Institute of Chartered Accountants of Scotland (ICAS) and by the New Zealand Institute of Chartered Accountants (NZICA). The two institutions consider that the requirement of the IFRS 3 (R) on the qualitative description of goodwill is characterized by “a lack of guidance on what is expected from this requirement”\(^{219}\). Indeed, the two organization recommend the re-worded of this requirement, in order to be more precise, or its deletion from the standard.

Another reason that may justify the poor compliance with the qualitative disclosure on goodwill may be the lack of technical competencies of the reporting entities compared with the challenging provisions required by the standard setters\(^{220}\). But, as Carlin and Finch underline in their research, this explanation would be persuasive only in the first years of application of this


requirement. This was not the situation of the Italian listed companies and, moreover, it is important to underline that it is difficult that the most capitalized Italian companies lack the technical competencies necessary to comply with this requirement.

Carlin and Finch, concluded also that, when it is not credible to attribute the fault of non-compliance to the competencies and capacity available to the companies, the reason of non-compliance should be attributed to the unwillingness to provide the required disclosures. This may be particularly true when there is a lack of enforcement. Indeed, according to the ACCA, the enforcement is a significant determinant of compliance, and more specifically the audit function\textsuperscript{221}. Anyway, it is also possible that the non-compliance depends on the firms’ decision to not follow the standard requirement to the letter. One of the reasons of the non-compliance with the qualitative description of goodwill, identified by Giuliani and Brännström, is the predominant top-down approach, according to which, the goodwill is only a residuum of the purchase price allocation. According to the authors, the goodwill is still considered just a mere difference because of the accountants’ reluctance to adopt new practices and ideas\textsuperscript{222}. The decision to not disclose the required information may depend also by the unwillingness of companies to provide information on goodwill which they consider strategic for the company’s success. Many companies consider that if the information required by the IFRS 3 (R) is so relevant for the market participants, it may be strategic also for their competitors. The non-compliance may consist in a method of the companies to protect their competitive edge and it may be an explanation of the unexpected resistance to disclose the information requested by the standard\textsuperscript{223}. Indeed, as Erkens commented, in some situations the “benefits associated with nondisclosure are greater than costs associated with non-compliance”\textsuperscript{224}.

\textsuperscript{221} Tsalavoutas, I., André, P., and Dionysiou, D., “Worldwide application of IFRS 3, IAS 38 and IAS 36, related disclosures, and determinants of non-compliance”, ACCA Research Report 134, pp 9, (May 2014)


Conclusion

After illustrating the main provisions of the IFRS 3 (R) on the intangible assets and goodwill in the business combination, some researches, about these requirements, were described. Many of these researches, illustrated in chapter two, underline the relevance that the recognition of the intangible assets has for the market participants, in particular, to justify the price paid for a business combination. Moreover, the researches demonstrated also that the disclosure or less of the qualitative description of goodwill informs about the quality of the deal.

Considering the relevance of that information, the aim of the research conducted was to determine the quality of the information provided to the market participants from the most capitalized Italian companies. In performing this research, the requirements analysed were: the disclosure of the purchase price; the disclosure of the purchase price allocation; the qualitative description of the goodwill; and the reasons for the recognition of a bargain gain.

The conclusion reached is that it is not possible to give an overall rating on the level of compliance of the Italian companies, but it is necessary to analyse their compliance referring to each individual requirement.

Indeed, while the Italian companies resulted quite compliant whit the disclosure of the purchase price and with the purchase price allocation, they resulted highly non-compliant in providing the qualitative description of goodwill and the reasons for the recognition of a bargain gain.

It is important to underline, anyway, that the results of the research are limited to the sample and to the period analysed and cannot be generalized for other Italian companies or other periods.

Anyway, the data and the information collected during this research may not provide an indication on the precise causes of non-compliance of the Italian listed companies on the last two requirements analysed. In general, this non-compliance may depend by the complexity of the standard or it may be a choice to not follow the standard to the letter.

In the first case, the IASB should take into consideration, as suggested by ICAS and NZICA, a re-wording of the standard and the provision of a clear guidance to the companies. Even if, the aim of the standard is to provide useful information to the market participants, it should not be required to the firms to provide an information, the cost of which is higher that the benefits arising to the users of the financial statements. In this case, the ICAS and NZICA suggest the elimination of the requirement.
If instead, it would be possible to establish that the level of non-compliance depends by the choice of the Italian companies to not follow the standard on the letter, the solution should consist in an improvement of the enforcement mechanism of the country. As concluded also by ACCA report “a consistent and full application of the mandatory disclosure provided by the IFRS 3 (R) would depend by the enforcement bodies and the auditing function in each country”\textsuperscript{225}.

Regardless of the cause of non-compliance of the Italian companies, it has to be underlined that the immediate effects of the non-compliance fall on the market participants and on the quality of their investment decisions. The temptation of hiding or manipulating the information that has to be disclosed, is particularly strong for companies which have performed bad deals. But, even if this behaviour can lead to a short-term advantage, in the long-term the real effects of each transaction will become evident to the market through the performance of the company. As consequence, the company itself will become one of the damaged subjects of their non-compliance, because of the loss of trust by the market.

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Appendix A

The scheme utilized to collect the data

Year

IFRS 3 (R)

<table>
<thead>
<tr>
<th>B64 (e)</th>
<th>B64 (f)</th>
<th>B64 (i)</th>
<th>B65 (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative description of factors that make up the goodwill</td>
<td>Fair value of total consideration transferred</td>
<td>Recognized amount of each major class of assets and liabilities at the acquisition date</td>
<td>Recognition of the bargain purchase power and the reason why the transaction resulted in a gain</td>
</tr>
</tbody>
</table>

C = Compliant  M = Material
NC = Non-Compliant  IM = Immaterial
NA = Not Applicable

<table>
<thead>
<tr>
<th>Company</th>
<th>Business Combination</th>
<th>Material/Immaterial</th>
<th>B64 (e)</th>
<th>B64 (f)</th>
<th>B64 (i)</th>
<th>B64 (n)</th>
<th>Notes</th>
<th>Pag of Annual Report Year</th>
</tr>
</thead>
</table>
| Company X | BC 1  
BC 2 | M | NC | C | C | NA | | |
| Company Y | BC 1  
BC 2 | | | | | | | |
| Company Z | BC 1  
BC 2 | | | | | | | |