International Accounting Disharmony: The Case of Intangibles

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International Accounting Disharmony: The Case of Intangibles

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Abstract *IAS 1 ("Presentation of Financial Statements") requires that application of all international standards is necessary in order to officially comply with International Accounting Standards. This appears to be a key statement for the move towards accounting harmonization. The feasibility of this kind of harmonization could be jeopardized if even one standard is "rejected" by companies. In this context, in the wake of the publication of IAS 38 "Intangible Assets", this paper examines the ways that twenty-one national and two international accounting standards approach intangibles, both in terms of definition and treatment. It shows that there is no conceptual framework commonly accepted and that there is a considerable lack of consistency both inter-country and intra-country. This challenges the principle of the acceptability of all international accounting standards by companies that wish to or are required to apply IASs. The disharmony highlighted by the advent of IAS 38 could be a sign of the failure of international accounting harmonization.*

Introduction

International accounting harmonization has recently been given a boost by the decision in May 2000 by the International Organization of Securities Commissions (IOSCO) to endorse the International Accounting Standards (IASs), while still allowing individual regulators to require certain supplementary treatments (Enevoldsen, 2000). Additionally, the European Commission proposed in a Communication dated June 2000 (IASB, 2001) to require all listed EU companies to prepare their consolidated financial statements in accordance with International Accounting Standards from 2005 onwards at the latest. This communication was followed by a proposal for a Regulation in February 2001, including the same requirement.

These important decisions and proposals could be expected to generate a certain optimism for players in the accounting harmonization field (i.e. managers, users of financial information, policy makers and researchers).

However, bearing in mind that according to the revised IAS 1 (IASC, 1997b, para. 11), "financial statements should not be described as complying with International Accounting Standards unless they comply with all the requirements of each applicable Standard…", this noticeable trend towards international accounting standards rests in the authors' opinion on one major implicit assumption: that companies are willing to accept **all** the international standards.

Against this context, it is interesting to assess the extent to which companies are able to adopt just one international accounting standard taken as an emblematic example: IAS 38 on "Intangible assets", only relatively recently issued (IASC, 1998b). This standard was chosen because it has been considered highly controversial, with the exceptional issue of two exposure drafts (IASC, 1995; 1997a).

This paper proposes an in-depth study of accounting standards dealing with intangibles, looking particularly closely at how the standards approach intangibles in terms of definition and treatment. In fact, international comparison of treatments of intangibles raises the question of whether international standard harmonization is actually feasible for intangibles. It also presents a panorama of approaches, which aims to be both up to date and to take in a

broader range of countries than the European Union alone, thus revealing the diversity of approaches.

In keeping with the existing literature on international accounting diversity, this paper shows that there is no commonly accepted conceptual framework and that there is much inconsistency both inter-country and intra-country. This challenges the assumption already referred to above that all international accounting standards are acceptable to companies that wish to or are required to apply IASs. The disharmony highlighted by the advent of IAS 38 could be a sign of the failure of international accounting harmonization.

The remainder of this article proceeds as follows. The next section defines the objectives of the research. The third section presents a review of the relevant literature, followed in the fourth section by a description of the scope of the survey, the sample and the methodology used. The following two sections present the results of this research, successively in terms of definition-recognition of intangible assets, and the ways of treating the value of intangibles over time. Section seven discusses some of the issues raised and suggests directions for future research, and the final section presents the conclusions.

How to approach the topic of intangibles

When faced with a complex problem, it is often tempting to plunge straight into its technical aspects first. In the authors' opinion, it is preferable to begin examining the problem by a general overview of the possible solutions and the stakes involved (for instance, from a financial point of view). This requires an "a-national" approach; in other words it is more useful to take time explaining the various possible solutions than to study the way each country handles the issue. The figures included in the paper are there to provide this overall view of the different solutions applied throughout the world.

Taking this perspective, one objective was to find out how accounting regulations approached intangible assets. This led to a relatively in-depth study of the regulations surrounding intangibles, as found in 23 international and national accounting standards, the term "standards" being used to cover both "standards" and "exposure drafts", unless it appears necessary to be more precise.

The approach to intangible assets was examined by studying the various definitions, recognition criteria and recommendations for treatment of their value over time (amortization, revaluation, etc.) set out in the accounting standards of a range of countries and organizations (see below for a list of the sample).

The IASC's publication of standard IAS 38 "Intangible Assets" (IASC, 1998b) places this research firmly in a context of accounting harmonization, and this study contains a timely international comparison of accounting standards concerning R&D costs, goodwill and other intangible assets. However, the objective of this paper is not to contribute to the development of a new table of accounting system types, since many classifications have already been proposed (see, Nobes and Parker, 2000, pp. 47-65). Moreover, Walton *et al.* (1998, p. 22), state that classifying accounting systems has a major defect. From the start "*it assumes that accounting is uniform within each country, which is manifestly not the case. A second problem is that these studies tend to oversimplify the similarities within one grouping, while over-emphasizing the differences between groupings.*"

This paper therefore proposes to approach the issue of intangible assets, through an international comparison of accounting standards covering R&D costs, goodwill and other intangible assets. Generally, these three categories are presented separately in the accounting laws and standards. For the purposes of this paper, the concept of goodwill is dealt with in individual company accounts as well as in consolidated financial statements. When the information is available and the accounting regulations make the distinction between the two kinds of goodwill, the two sets of solutions are presented. When not explicitly mentioned, it should be assumed that the treatment of both categories of goodwill is identical.

The major research question is thus the following: the objective of compliance with all standards set by the IASC in IAS 1 (IASC, 1997b) cannot be achieved if there is even one exception. Is IAS 38 going to be this exception? Additionally, the following idea could be put forward: the approaches and underlying frameworks existing in the countries studied are fundamentally different, which prevents all possibility of accounting harmonization in relation to intangibles.

Literature review

Accounting for intangible assets

As mentioned by Cañibano, García-Ayuso and Sánchez (2000), literature has been discussing the topic of accounting for and reporting intangible assets for a long time (Dicksee, 1897; Leake, 1914; Canning, 1929). During the last two decades, more and more theoretical attention has been given to intangible assets in the field of financial accounting (Eggington, 1990; Hodgson *et al.,* 1993), with particular attention being paid to goodwill (Colley and Volkan, 1988; Ma and Hopkins, 1988; Henning, 2000). There are significant differences between countries in the treatment of intangible assets that can seriously limit the comparability of financial statements in an international context (see for example, Brunovs and Kirsh, 1991; Emenyonu and Gray, 1992).

Sources on accounting standards

Some of the surveys on accounting for intangible assets are based on accounting standards. The official sources vary according to the country: they may be called laws, standards, or doctrines. These sources are of interest because they were used to find and/or better understand the accounting standards in a given country. First of all, accounting standards can be found in works covering many countries, principally, Nexia International (1997), Orsini *et al.* (1999), Alexander and Archer (2001) and Walton *et al.* (1998). Country monographs are also interesting: Brennan *et al.* (1992), Christiansen and Elling (1993), Papas (1993), Clark (1994), Ferreira (1994), Ordelheide and Pfaff (1994), and Williams (1997). Finally, several references dealing with international accounting and including some developments on a given number of countries should be mentioned: Radebaugh and Gray (1997), Nobes and Parker (2000), and Choi *et al.* (1999).

Research in international accounting

Walton *et al.* (1998, p. 19) identified six categories of research in international accounting: (1) analysis of different sets of practices, or country studies; (2) investigation of differences, or comparative studies; (3) analysis of the reasons for differences; (4) classification of different

sets of practices; (5) evaluation of accounting harmonization; (6) investigation of the impact of international accounting diversity.

This work falls into the scope of a comparative study, but is complemented by classification of different sets of practices. It also relates to an assessment of accounting harmonization. However, the main objective of this study is to examine the approaches to intangibles, and to do so through international comparison. Given the current context of global harmonization, it is also interesting to observe the points of convergence and divergence between national approaches and the new standard on intangible assets IAS 38, in order to assess the feasibility of the "global" application of IASs.

Sample of countries and organizations

This study is based on the accounting regulations of a sample of 21 countries and two bodies. First, all the European Union (EU) members are included: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the UK. Wishing to extend the study to beyond the EU, in order to throw new light on the issue of accounting for intangibles, another group of countries made up of Australia, Canada, Japan, Norway, Switzerland and the USA was added. These countries were chosen because of their importance, as measured by the frequency with which their accounting standards are quoted in works on international accounting. Finally, it is essential to include two international organizations which play a vital role in the move towards harmonization of accounting standards: the IASC and the European Union, based on its 4th and 7th directives. For practical purposes, the sample was separated into three groups: "the European Union", "Other Countries" and "International Organizations". Presentation within the groups is by alphabetical order.

Collection of information

First of all the accounting information available on R&D costs, goodwill and other intangible assets was obtained. Information was gathered from the professional and academic works mentioned above, as well as from the original official documents themselves where available. Finally, a certain number of experts were asked to check the accuracy of the information given in the different tables (see acknowledgments).

Procedure

As the objective of this research was to study the accounting approaches applied to intangibles in different countries, the information was grouped according to the two main problems associated with intangibles: recognition, and accounting for changes in value. The types of definition for intangibles were first studied, followed by the recognition criteria for internally developed or purchased intangibles. These criteria are not dissociable from the definitions in understanding a country's approach to intangible assets, as they often fill in the gaps left by definitions consisting simply of lists. Secondly, the recommended ways of accounting for changes in the value of intangible assets were examined.

The information contained in all the standards was then summarized and three tables were established (e.g. definition, recognition and changes in value). In establishing these tables, the various possibilities in terms of definition, recognition and treatment of changes in value, were summarized in the form of decision trees. These diagrams are included prior to the tables.

Results: How intangible assets are defined and recognized

Definitions

In this section the "definitions" of intangible assets encountered in accounting standards were considered. The term definition means in this context the way that different countries' accounting systems approach and envisage the concept of an intangible. In practice, whenever the question of defining intangible assets arises, there are two main types of approach as shown in the diagram below (Figure I "How intangible assets are defined and example in UK"). They are: (1) actual definitions, which have been called "conceptual"; and (2) lists of intangible assets, a kind of "inventory".

Take in figure I

These approaches are not mutually exclusive. In fact, a country or organization that applies a conceptual approach to intangibles generally also supplies a list of intangibles concerned,

mainly for reasons of presentation. In many cases this is not supposed to be an exhaustive list. It is primarily meant to make sure that different sorts of intangibles are not combined.

The conceptual approaches can be divided into three categories: (1) definitions by opposition (for example, “fixed assets other than tangible or financial”); (2) tautological definitions (for example, “an intangible asset is characterized by a lack of physical substance”; “in order to be included in the balance sheet category entitled ‘Intangible Fixed Assets’, an asset must be intangible”); (3) “real definitions”, that is definitions which make a genuine conceptual effort to determine what an intangible asset is.

It should be added that, within the conceptual approach, a definition can include several “sub-approaches” at once. The definition given in the UK (ASB, 1997, para. 2) illustrates this situation (see, Figure I above). A table summarizing information corresponding to the Figure I diagram is shown in Table I “Definition of intangibles in accounting standards and explicit conceptual frameworks”).

Take in table I

The total number of regulations studied is 23 (15 EU members, 6 other countries and 2 international organizations). The total is higher than 23 due to the fact that some countries and organizations fall into more than one category, the classification being based on parts of definitions. Of the 23 sets of regulations studied, all – except the IASC – define intangibles by means of lists comprising the types of intangible items which can be recorded as an asset. The IASC does not give a list of intangible assets, but includes a list of intangible items which fail the recognition criteria: *“internally generated goodwill, brands, mastheads, publishing titles, customer lists and items similar in substance should not be recognized as assets”* (1998b, para. 51).

Ten countries have a conceptual approach to intangible assets in their standards. Of these ten, seven have tautological definitions (i.e. Ireland, the Netherlands, the UK, Canada, Switzerland, the USA, and IASC); six define intangibles by opposition (i.e. Austria, France, Germany, Ireland, the Netherlands, and the UK) and four can indeed be considered as having real definitions (i.e. Ireland, the UK, the USA, and IASC).

Taking a closer look at the definitions called "tautological", it appears that the description is not totally accurate. In fact, most of the countries or organizations concerned begin by stating a tautology (e.g. an intangible asset is intangible or lacks physical substance), but then goes on to define such assets either by opposition, and/or by a definition which attempts to say what an intangible asset actually is.

Definitions and conceptual frameworks

It can be seen from Table I that although efforts have been made in certain standards to define intangibles, the definition is followed by a list of recognized intangibles. This situation can be explained in two ways: (1) there is nothing fundamentally different about tangible and intangible assets; (2) there is no theoretical conceptual framework behind the approaches to intangible assets.

The first explanation has been debated in literature, with Lev and Zarowin (1999) claiming that intangibles should be treated like any other tangible asset, and Hendriksen and van Breda (1992, p. 634) arguing *that "intangibles are no less assets just because they lack substance. Their recognition should follow, there fore, the same rules as all assets"*.

In support of the second explanation, it could be interesting to identify any links between the existence of a definition in accounting standards and the presence or otherwise of an explicit conceptual framework in the country concerned. Table I (see above) shows both the type of approach used to define intangible assets and the existence or otherwise of a conceptual framework (mainly based on Walton *et al.,* 1998).

In the sample, all the countries – except Australia – with a conceptual framework or currently developing such a framework have attempted to provide a definition of intangible assets, either by opposition, or tautological or real, in some cases before supplying a list. Austria, Germany and Switzerland are the only countries with a definition not to have developed a conceptual framework. However, in the case of these countries, even though there is no explicit conceptual framework, it could be said that there is an implicit framework. For instance, in Germany, the "*Grundsätze ordnungmässiger Buchführung*" do constitute something like a framework (Walton et al., 1998, p. 80). The other countries without a

conceptual framework for intangible assets do not have a conceptual approach to them either, but simply a list-type approach of what constitutes an intangible.

It can therefore be inferred that there is a link between the desire to establish a conceptual framework and the existence of a conceptual definition approach to intangible assets, rather than one based on a list. This implies that the conclusion reached by Thibierge (1996, p. 17) is valid. He attributes the lack of overall homogeneity among accounting standards to the absence of any conceptual framework with a solid theoretical basis.

To conclude on the topic of the definition of intangibles, as Lacroix (1996, p. 8) suggests, the fragmented approaches mentioned previously encourage the development of more general criteria for recording intangibles. The concept of an intangible asset – fixed assets other than tangible assets and financial assets – does not provide a basis for more in-depth analysis. Lacroix identifies generally used recognition criteria for intangible assets from a study of the specific conditions for recording intangibles in company and consolidated financial statements. She defines criteria for inclusion and criteria for exclusion (see below).

It could therefore be considered that the "gaps" encountered at the first level of approach (definitions) are "filled in" in the standards, by the development of recognition criteria. These criteria are examined in the following paragraph.

Recognition of intangible assets

It has been assumed that the recognition of intangible assets was determined by the trade-off between relevance and reliability (conservatism/prudence) and the way they affect the information value of accounts (see, Hoegh-Krøhn and Knivsflå, 2000). In practice, the criteria for recognition given in accounting standards are not dissociable from the thinking behind the way they are defined. When the approach applied in defining intangibles turns out to be conceptually weak, the recognition criteria compensate for the gaps left by inventory-style approaches. In the various accounting standards, three categories of intangibles are referred to: research and development costs (R), goodwill (G), and other intangible assets (O), which covers intangibles such as patents, licenses, brands (trademarks), software and start-up costs (which are recorded as deferred assets in certain countries), among others.

The following diagram groups together the ways in which intangibles are recognized in accounting systems (see, Figure II "Recognition of intangible assets").

Take in figure II

This initial classification shows the differences between the recognition of purchased and internally generated intangible assets. There is also a distinction between R&D costs, goodwill and other intangible assets in the recognition criteria (see, Table II "Intangibles recognized"). Depending on the standards, the capitalization may be mandatory or optional. This difference is not shown in the table.

The exceptional treatment of writing off goodwill against reserves in business combinations is no longer adopted by the IASC, and is therefore more rarely recommended in national standards – only Denmark, Germany, the Netherlands and Switzerland still allow it. The United Kingdom, which was a country known in Europe for writing off goodwill, decided in standard FRS 10 (ASB, 1997) that this option could no longer be allowed.

Take in table II

All the countries in the sample recognize purchased intangibles, and this shows that once there is a reference to the market, the question of recognition is no longer an issue, for there is no problem regarding identification (or separability), nor regarding valuation.

However, this is not true for the recognition of internally generated intangibles. In Germany and Austria, if intangibles have been internally generated, under no circumstances can an enterprise recognize them as assets[1]. In the sample, the regulations on recognition of internally generated intangibles are as follows: (1) None of the countries and organizations recognize internally generated goodwill; (2) 18 out of 23 countries and organizations allow recognition of other internally generated intangible assets, subject to certain conditions; (3) 20 out of 23 countries and organizations allow recognition of R&D costs (or at least development costs) borne by the enterprise, subject to certain conditions.

These conditions are called "recognition criteria". Nevertheless, it can be seen that all the countries and organizations use recognition criteria for capitalization of intangibles, which

supports the view that definitions of intangibles are often too brief to be useful in determining the appropriate accounting treatment.

To study the recognition criteria as such, the classification developed by Lacroix (1996, pp. 8-10), referred to earlier, was used. It identifies inclusion criteria and exclusion criteria (see, Figure III "Classification of intangibles based on recognition criteria", which relates the inclusion and exclusion criteria to the major categories of intangibles).

Take in figure III

It is possible to establish a table of comparison between Lacroix's classification and the recognition criteria used by the countries and organizations in the sample. This table only concerns internally generated intangible assets (see, Table III "Internally generated intangibles and criteria for recognition").

Take in table III

The above table illustrates 16 countries and organizations. Germany and Austria are not included because they do not recognize internally developed intangibles, and Greece, Portugal, Japan, Norway and the European Union were also withdrawn, because the information concerning these countries and organizations was not available and/or they did not have specific criteria for recognition of internally developed intangibles.

Table III raises several issues. For example, IAS 38 states two exclusion criteria: an enterprise should "recognize an intangible asset (at cost) if, and only if: (a) it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise; and (b) the cost of the asset can be measured reliably". However, it can be argued that the standard also includes an inclusion criterion (identifiability) in its definition of intangibles: *"An intangible asset is an identifiable non-monetary asset without physical substance…"*. To be "non-monetary" and "without physical substance" is intrinsic to an intangible, while its "identifiability" corresponds to an accounting approach which is not unproblematic as a concept, and has been debated within the IASC.

Taking Tables II and III together, the recognition criteria can be classified in order of importance/frequency. Reference to the market is used by only two of the sample countries, which is logical with regard to internally generated intangibles. On the other hand, all the countries and organizations have adopted the risk level recognition criterion, which is consistent with the fact that there can be no asset unless there is a net future benefit.

There is also an implicit classification of intangibles emerging, based on two inclusion criteria and two exclusion criteria as defined by Lacroix. Figure III (see above) shows that is it possible to make a difference between purchased intangibles, which mainly refer to the "market" criterion, internally generated R&D, which uses the identifiability criterion plus the two exclusion criteria, and internally generated other intangible assets, which are mostly related to the exclusion criteria (although identifiability may be included in some standards).

Examination of the definitions and recognition criteria thus leads to a better understanding of the accounting standards' approaches to intangibles, where the definitions alone would not have sufficed. There is still one crucial matter to consider: the accounting treatment of changes in the value of intangibles.

Results: Treatment of changes in the value of intangible assets

Only intangibles that have already been capitalized will be taken into consideration. Once again the study is based on the three categories referred to above: R&D costs, goodwill and other intangible assets. The first three treatments are for cases in which the cost of the asset is spread over time (amortization), the cost of the asset remains unchanged (no amortization) and the asset value decreases (impairment). If it increases in value, some countries allow revaluation while others do not (fourth treatment) (see, Figure IV "Treatments of changes in value"). It must be borne in mind that revaluation is based on the fair value of the intangible asset. This is a different concept from the reversal of an impairment loss (also called "restoration of past losses").

Take in figure IV

Countries which amortize intangible assets, do not always behave in the same way as regards the duration of amortization. Some official standards simply indicate that amortization must

be recorded over the useful life of the asset; others meanwhile require amortization over the useful life, up to an upper limit (5, 20 or 40 years) (see Table IV "Treatment of decrease and increase in value (capitalized intangibles)": for countries where a rule and one or more exception(s) coexist, the table shows the main rule).

Take in table IV

Few countries do not apply amortization to intangibles once capitalized. The general rule as shown by Table IV is to amortize over the asset's useful life, often subject to a legal maximum duration of 5 or 20 years, with only the USA and Canada allowing a maximum of 40 years. (In the USA, a draft reform, currently under debate, proposes to abolish amortization and replace it by an impairment test[2]).

The concept of impairment put forward by the IASC has also been adopted by some countries: the Netherlands for goodwill, Canada, Ireland, the UK and the USA for goodwill and other intangibles. The situations in which implementation of impairment is compulsory may vary. For example, IAS 36 (IASC, 1998a) requires comparison of the recoverable amount of an asset and the carrying amount. In addition, IAS 38 prescribes an impairment test when the amortization period exceeds 20 years. It could be added that, despite the restrictive image given by the table, the countries that have not "officially" adopted a rule on impairment generally have some equivalent concept to that put forward by the IASC. This concept may take a different form (e.g. additional write-off) and it may not be specific to intangibles, but there is often a lower of cost and market rule for intangible assets. It is also important to remember that amortization and impairment are not mutually exclusive concepts. On the contrary, impairment can be added to amortization.

Finally, only three countries, in addition to the IASC, allow revaluation of intangible assets: Ireland, the UK, and Australia.

Discussion and directions for future research

This paper has been based on accounting standards which develop the concept of "intangible assets". Meanwhile, a significant amount of literature deals with "intangibles". This nuance calls for further investigation. One possible explanation could arise from the difference

between intangibles which are capitalizable intangible assets, and other intangible items which fail the recognition criteria. For instance, research is not an "intangible asset" (but is an "intangible"), as it must be expensed, whereas certain development costs must be capitalized.

This paper has shown a relationship between the existence of a conceptual framework and the type of definition given to intangible assets. The significance of this result is limited by the debate surrounding the notion of "conceptual framework" in certain countries and the fact that only "official" or "officially in development" conceptual frameworks were included in this research. An in-depth study of each country could be carried out in order to identify implicit conceptual frameworks.

The determinants of companies' reporting practices with regard to intangibles could be studied by relating these practices to accounting standards, and more precisely, to the approach adopted by standard-setters to define intangible assets. It would then be interesting to see whether differences in accounting standards lead to differing practices.

Several authors have proposed capitalization of certain intangibles (see, in particular Lev and Sougiannis, 1996; 1999). It might be interesting to study the value-relevance of accounting information related to capitalized intangibles in countries where the accounting standards allow such capitalization (see, Table II). Moreover, the value relevance could be explored to see whether investors adjust in any way for the variety of standards and whether the standards have practical consequences in terms of share prices. Finally, the classifications of accounting systems proposed by several authors, summarized in Nobes and Parker (2000), could be examined in the light of the treatments of intangibles adopted in various countries.

The diversity in the treatment of changes in value as highlighted in Table IV and Figure IV reminds that opinions vary as to whether an intangible asset should be subject to amortization at all, and how to determine its useful life. Taking the example of brands, the main arguments against a definite useful life, and therefore against amortization of brands, are as follows: (1) In many countries the legal protection of brands is unlimited, or at least renewable indefinitely. (2) Some brands are very old (150 years for champagnes such as "Moët", or cognacs like "Martell" and "Rémy Martin", other old brands are "The Times", "Coca-Cola" and "Walt Disney"). (3) Some authors argue that the value of a brand is maintained or even increased by huge advertising expenses, which are recognized as expenses and do not

therefore justify amortization or a limitation of the useful life (Harding, 1997, pp. 81-84; Pizzey, 1991, p. 26).

Those in favor of amortization and a limited useful life for brands put forward the following responses to these arguments: (1) For the purposes of financial reporting, an economic approach is more relevant than a legal point of view. (2) The expenses incurred to maintain a brand, e.g. advertising costs, are not arguments in favor of an indefinite life as it could mean that the purchased brand is eventually replaced by an internally generated brand, which should not be recognized as an asset. (3) Just as there seem to be examples of brands always keeping their value, there are also brands which have vanished, like “Triumph” and “Simca” (cars) and “Steinhäger” (spirit) (Harding, 1997, p. 82).

In the end, the debate over brand amortization, which can be broadened to intangible assets, depends on the function attributed to amortization. If the purpose of amortization is to reflect current value, there seem to be more objections than reasons for its application; if the purpose of amortization is to spread the recognized amount over a limited time, there are more arguments in favor of regular amortization (Barth and Kneisel, 1997, p. 474).

Conclusion

This paper has studied the definitions of intangible assets given by accounting standards and proposed to classify these definitions according to two criteria: conceptual approach or list-based approach. It has shown that the “gaps” encountered at the definition level are “filled in”, in the standards, by the development of recognition criteria. To study the recognition criteria as such, this article used a classification, which identifies inclusion criteria (market, identifiability) and exclusion criteria (risk level and value measurement). Finally, the study of accounting rules relating to changes in the value of intangible assets (amortization, impairment) shows there is considerable diversity.

The lack of overall homogeneity in the approach to intangibles is evidence that no generally accepted conceptual framework exists. At national level, many countries do not prescribe just one treatment for each type of intangible, so perhaps it is fair to say that the lack of international homogeneity itself arises from a lack of national homogeneity. This finding may be of interest for accounting policy makers, practicing accountants and researchers as it throws a rather pessimistic light on the future of accounting harmonization. Against such a backdrop, how can the IASC encourage a move towards globalization and the development of

the various reporting frameworks for intangible assets if the countries do not reduce their own internal diversity and do not try to approach intangibles in a uniform way?

All the efforts to attain global harmonization could result in failure, in particular because of IAS 38 which is in opposition to the treatments adopted in several countries. And the recent decision taken by the FASB to revise its standard on business combinations in order to replace the amortization of goodwill by an impairment test will not help in the quest for a certain level of harmonization with regard to intangible assets (FASB, 2001). Maybe it is worthwhile thinking about other ways of making accounting comparable in the meantime, in order to avoid fundamental opposition (for instance, on the length of the amortization period), for example by providing additional information in the notes. One possibility is the disclosure of an additional statement of the breakdown, changes and values for the most important groups of intangible assets in a corporation (Haller, 1998, pp. 583-591). This could help the users of financial information but would not solve the problem of full application of all the international accounting standards.

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List of tables

Table I. Definition of intangibles in accounting standards and explicit conceptual frameworks

Countries and organizations	*Conceptual approaches*			*List of intangibles*	*Conceptual Framework*
	By opposition	*Tautological*	*Real*		
European Union					
Austria	x			x	No
Belgium				x	No
Denmark				x	No
Finland				x	No
France	x			x	In development
Germany	x			x	No
Greece				x	No
Ireland	x	x	x	x	In development
Italy				x	No
Luxembourg				x	No
Netherlands	x	x		x	Yes
Portugal				x	No
Spain				x	No
Sweden				x	No
UK	x	x	x	x	In development
Sub-Total	***6***	***3***	***2***	***15***	
Other countries					
Australia				x	In development
Canada		x		x	Yes
Japan				x	No
Norway				x	No
Switzerland		x		x	No
USA		x	x	x	Yes
Sub-Total	***0***	***3***	***1***	***6***	
Supra-national accounting organizations					
IASC		x	x		Yes
European Union				x	No
Sub-Total	***0***	***1***	***1***	***1***	
Total	**6**	**7**	**4**	**22**	

Table II. Intangibles recognized

Countries and organizations	*Purchased Intangibles*		*Internally Generated Intangibles*	
	Recorded as an asset	*Written-off against reserves*	*Capitalized*	*Non capitalized*
		European Union		
Austria	R, G, O			R, G, O
Belgium	R, G, O		R, O	G
Denmark	R, G, O	G	D	R, G, O
Finland	R, G, O		R, O	G
France	R, G, O		R, O (software)	G, O (brands)
Germany	R, G, O	G		R, G, O
Greece	R, G, O	G	R, O	G
Ireland	R, G, O		D, O	R, G
Italy	R, G, O		D, O	R, G
Luxembourg	R, G, O		R, O	G
Netherlands	R, G, O	G	R, O	G
Portugal	R, G, O		R, O (start-up costs)	G
Spain	R, G, O		R, O	G
Sweden	R, G, O		R, O	G
UK	R, G, O		D, O	R, G
		Other countries		
Australia	R, G, O		R, O	G
Canada	R, G, O		D	R, G
Japan	R, G, O		O, D (classified as deferred assets)	R, G
Norway	R, G, O		R, O	G
Switzerland	R, G, O	G	D, O	R, G
USA	R, G, O		O (namely software)	R, G
		Supra-National Accounting Organizations		
IASC	R, G, O		D, O	R, G
European Union	R, G, O	R (research), G	R, O	G

R = R&D costs; D = only development costs (some countries and organizations make the difference between research and development costs); G = Goodwill; O = Other intangible assets.

Table III. Internally generated intangibles and criteria for recognition

Countries and organizations	*Inclusion criteria*		*Exclusion criteria*	
	Market	*Identifiability*	*Risk level*	*Value measurement*
Belgium			x	x
Denmark			x	
Finland			x	
France		x	x	x
Ireland	x	x	x	x
Italy			x	
Luxembourg			x	x
Netherlands		x	x	x
Spain		x	x	x
Sweden		x	x	
UK	x	x	x	x
Australia			x	
Canada		x	x	x
Switzerland		x	x	x
USA			x	
IASC		x	x	x
Total	**2**	**9**	**16**	**10**

Table IV. Treatment of decrease and increase in value (capitalized intangibles)

Countries and organizations	*Decrease in value*[3]					*No decrease in value*		*Increase in value*
	Amortization				*Impairment*	*No amortization*		*Revaluation*
	Useful life	*Max: 5 years*	*Max: 20 years*	*Max: 40 years*		*No explanation*	*Unlimited useful life*	
European Union								
Austria	O, G							
Belgium	R, G, O	R, G					R, G, O	
Denmark	D, G, O	D, G, O						
Finland		R, G	R, G, O[4]					
France	O	R, G[5]					G, trademarks	
Germany	G, O							
Greece	O	R, G, O						
Ireland	D, G, O		G, O		G, O		G, O	O[6]
Italy		D, G, O[7]						
Luxembourg	R, G, O[8]	R, G						
Netherlands	O	R, G[9]			G			
Portugal	G, O	R, G						
Spain	O	R	G[10]					
Sweden	R, G, O	R, G, O	G[11]					
UK	D, G, O		G, O		G, O		G, O	O[12]
Other countries								
Australia	R, O		G				O	O
Canada	D			O, G[13]	G, O			
Japan	O	D, G	G[14]					
Norway	R, G, O	R, G						
Switzerland	R, G, O		R, G, O					
USA				G, O	G, O			
Supra-National Accounting Organizations								
IASC	D, G, O		D, G, O		D, G, O			O[15]
European Union	R, G, O	R, G					O	

R = R&D costs; D = only development costs; G = Goodwill; O = Other intangible assets. If for a given country or organization, both the "Useful life" column and a maximum duration column are marked, this means that the country or organization concerned amortizes the intangible asset over its useful life, subject to an upper limit which may be exceeded if details are disclosed in the notes.

List of figures

Figure I. How intangible assets are defined and example in UK

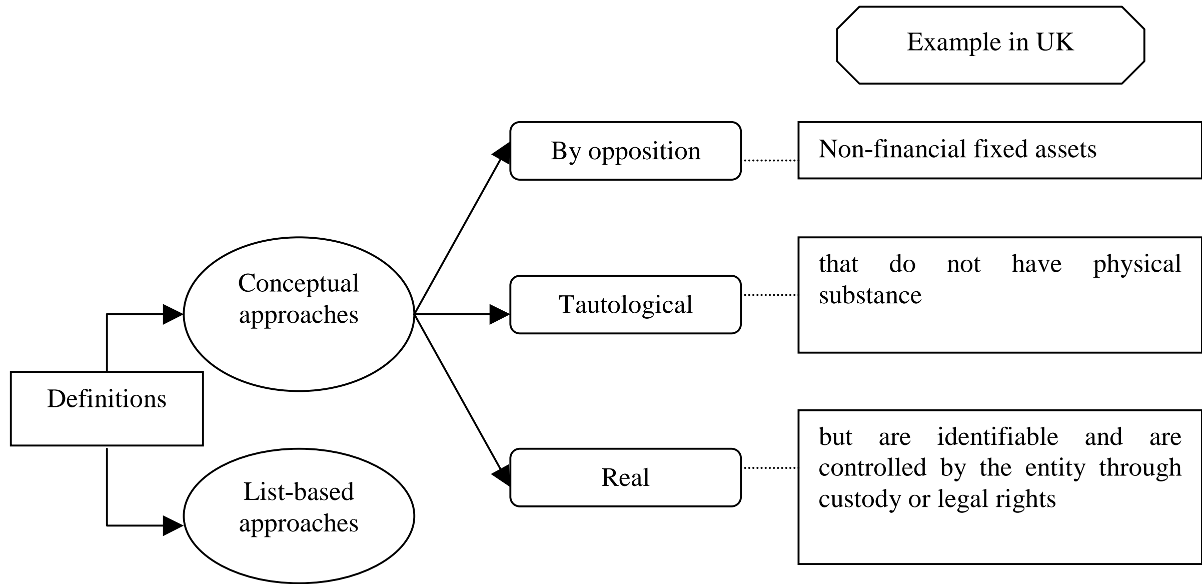
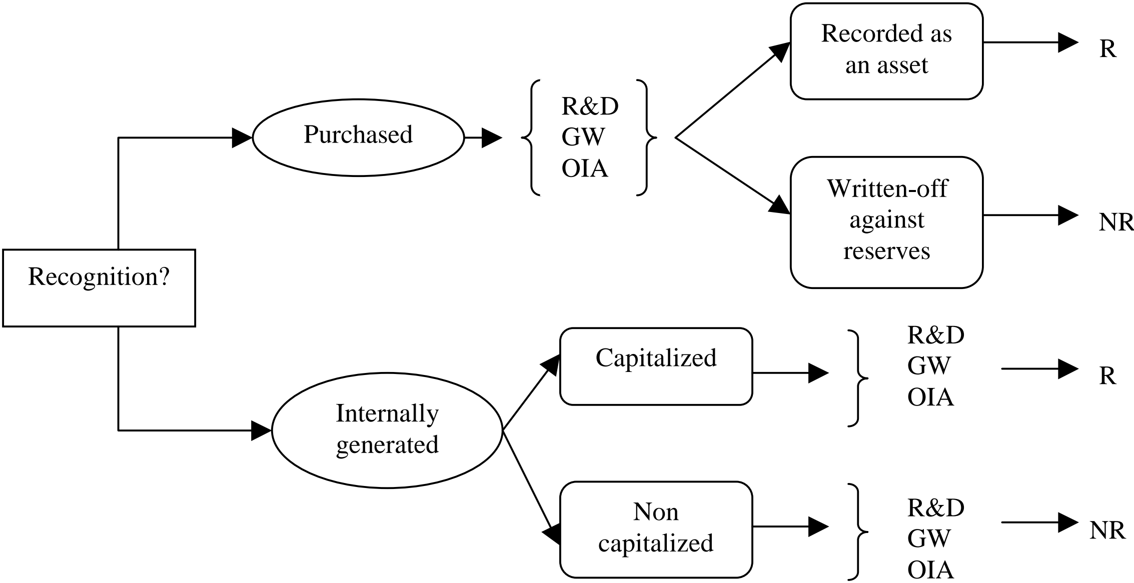


Figure II. Recognition of intangible assets



R: recognized – NR: non-recognized. R&D: R&D costs – G: Goodwill – O: Other intangible assets.

Figure III. Classification of intangibles based on recognition criteria

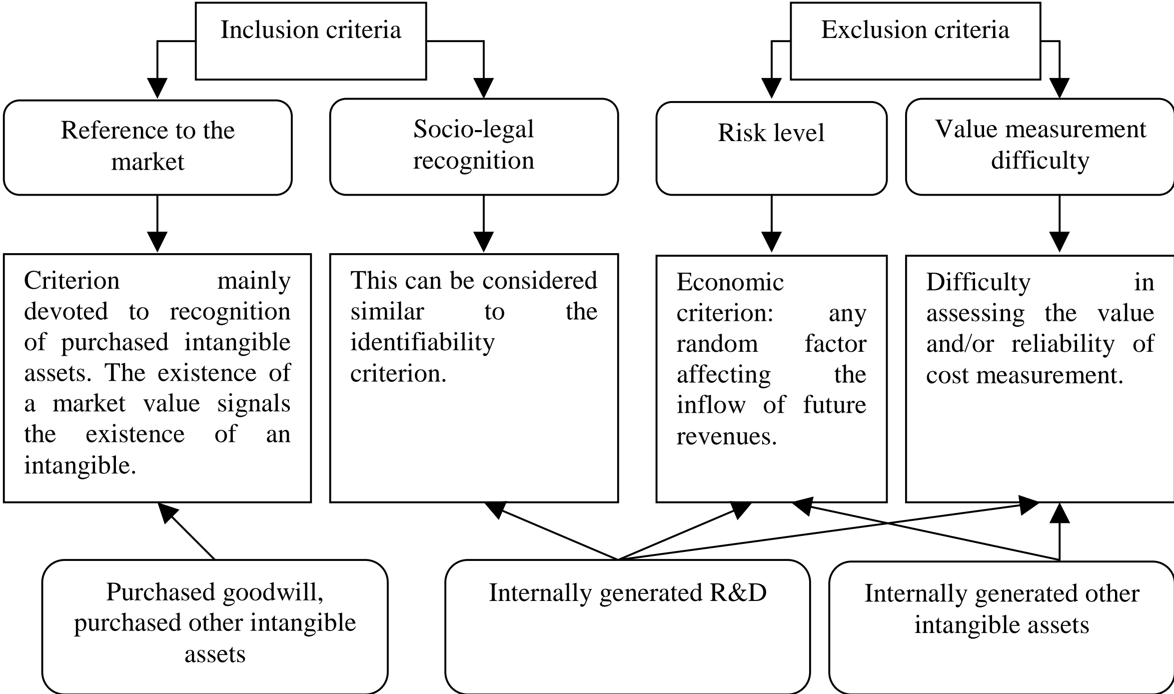
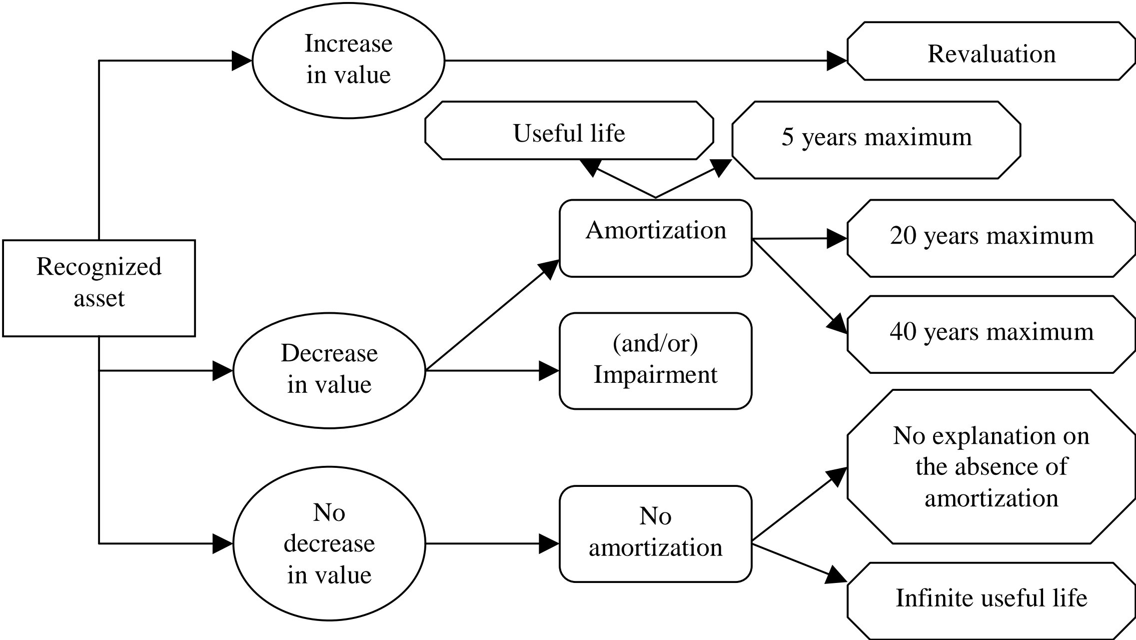


Figure IV. Treatments of changes in value



NOTES

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[1] Strictly speaking, in Germany, this is true for intangible assets classified as non-current assets.
[2] See, FASB, 2001.
[3] This category has been called "decrease in value" for simplicity's sake, although the amortization is not strictly speaking a decrease in value, but a cost allocation.
[4] 5 years is the main rule.
[5] Goodwill on consolidation can be amortized over longer than 5 years (no specified rule).
[6] Only in rare cases ('readily ascertainable market value').
[7] For goodwill, it is possible to increase this period "slightly" provided that this increased length does not exceed the period of use of the asset.
[8] + formation costs.
[9] Goodwill on consolidation can be amortized over longer than 5 years.
[10] 20 years (New law dated November 16, 1998, effective January 1, 1999). No amortization rules mentioned for patents and trademarks.
[11] 5 years is the main rule.
[12] Only in rare cases ('readily ascertainable market value').
[13] An exposure draft published in February 2001 proposes to replace the amortization of goodwill by an impairment test.
[14] Consolidation Goodwill (Consolidation Adjustment Account).
[15] Reference to an active market.