A literature review on intangible assets
Critical questions for standard setters

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Challenges around IAS 38 on intangible assets – a literature review investigating critical questions of relevance for regulation

Introduction

There are different research traditions around intangible assets. For financial accountants the topic has been debated since at least 1950’s (for goodwill even longer). Lately the topic has rendered renewed interest in financial accounting through a large number of so called value relevance studies, but there are also other aspects to it. The topic became hot in management accounting after the publication of the relevance lost book by Kaplan and Norton in 1998? A large number of publications about ‘ABC’ and ‘balanced scorecard’ followed from this work. Also related to the management aspect of intangibles are the studies built on the ‘resource-based view’ on the firm mainly found in general management journals. A combination about internal management purposes and external information purposes of measuring and reporting intangibles can be found in the literature labeled ‘intellectual capital’. In this paper we will mainly discuss the research that has been conducted in financial accounting that according to our view has had the most extensive and sophisticated research and debate concerning accounting measurement and reporting questions of importance for regulating the issue since this is the focus of our study. We will briefly here and there touch upon the other studies where relevant. It may also, as we have discovered in our review this far, be relevant to dig deeper into other fields. We have, for example, discovered that the issue about whether or not brands can be separately identified demands knowledge about how brands are created internally in the firm. Such knowledge is to be found in ‘marketing’ we believe.

Method

This paper contains a literature review on the financial accounting aspects on intangibles, i.e. measuring and reporting to external users. It covers mainly the last ten years of the literature, but when older work is considered still relevant it is included. The relevance of older work is

1 Separate identifiability is considered by standard setters to be of vital importance in order for them to accept capitalization of brands.
estimated mainly through the number of contemporary references to it. The paper also covers a review of the efforts by the IASB to regulate the issue with the ultimate goal of nailing the critical issues related to regulating intangible assets.

Initially a data base search was conducted in EBSCO with the key words *intangible, assets, accounting, financial reporting*, in different combinations. Thereafter a manual search was conducted in the main financial accounting journals from the ABS list, see enclosure. Out from the perspective of this study we found relevant articles mainly in:

- Abacus
- Accounting and Business Research
- Accounting, Auditing and Accountability Journal
- Accounting in Europe
- British Accounting Review
- European Accounting Review
- International Journal of Accounting
- Journal of Accounting Literature

To the list of articles we found after this search we have added literature found relevant and valuable through references in those articles. Regarding catching what has been going on in the regulatory field we have chosen to add material directly from the IASB (drafts, standards, basis for conclusions). Since there is not so much reasoning in this material we have also searched for commenting articles in the practitioners journal ‘Accountancy’ published by the British accounting profession. This journal has a good reputation. Besides, since the IASB has its’ headquarter in London and a great number of the staff are British we considered it relevant to use a British journal. We also know that the work by the IASB is a matter of great interest among the Britons.

For the research directions we have chosen not to cover in depth: the balance scorecard tradition, the intellectual capital tradition, the resource based view within management and the value relevance tradition, we have looked for articles synthesizing that literature that will now be explained. That literature is published in other kinds of journals than those we have listed above. We found an article by Kaufmann & Schneider (2004) claiming to synthesize the literature about intangibles the last ten years but we found that it contained many articles
published in the *Journal of Intellectual Capital* that dealt with particularly that focus on intangibles, as can be explained by that one of their search key words was intellectual capital.. Kaufmann & Schneider (2004) did complement their database search with the following journals: *Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, Harvard Business Review, Journal of International Business Studies* and *Strategic Management Journal*. The choice of these journals that does not at all coincide with our choice is explained by that they are major business journals. Our comment is that this gives their literature review more of a management perspective than an accounting perspective (measuring and informing) that is our focus. We have used the article for that purpose.

The value relevance research can mainly be found in the American accounting journals: *Accounting Review, Journal of Accounting and Economics, Journal of Accounting Research* and *Accounting horizons*. We found valuable articles written by Wyatt (2005, 2008) synthesizing that literature.

Articles synthesizing the balance scorecard and ABC literature

Articles synthesizing the resource based view on the firm

**The importance of intangibles for macroeconomic development**

A lot of people claim that, today, the nature of investments in global market is shifting from tangible to intangible. Many companies spend huge amount of capital on intangible investment, which mainly is developed within the firm. This shift highlights necessity and importance of measuring the contribution of intangible assets to the overall welfare (Nakamura, 2008). “Nakamura (2000) estimates the value of U.S. corporate investment in intangibles during 2000 to be around $1.0 trillion, making it roughly equal to the total investment of the non-financial sector in property, plant and equipment. Hall (2000) estimates the total value of intangible capital as ranging between half to two-thirds of the total market value of publicly traded corporations, as indicated by the $q$ ratio (market value to replacement cost of physical assets)….” (Lev m fl 2009, s 275). Bookstaber gives us an illustrative picture about the importance of intangibles compared to tangibles:
“The reach of intangibles is extensive; as Charles Leadbeater has said, ‘modern corn is 80 percent science and 20 percent corn,’ alluding to the extensive lab development behind hybrid corn. By some estimates, intangible assets now make up 80 percent of the value of the S&P 500. They are what provide companies with their franchise value, sometimes bordering on monopolistic market position. Intangible assets are the product of imaginative people who walk out the door every night; others are formulas locked in a vault. And in many cases, once they have been created and the intellectual property has been claimed, they cannot be reproduced at any price.” (Bookstaber, 2007, p 138 quoted in Johnsone, 2009, p 372)

If you take an iPod, flip it over, and read the script at the bottom. It would say: "Designed by Apple in California, Assembled in China". The location where the commodity was psychically made somehow is not that important to its customers. It is the great design, technical innovation and “brand recognition” of Apple what the market price of iPod holds in it. And this innovation and unique design have helped Apple Computer sell more than 40 million iPods. Yet the published data such as financial statements do not count what Apple spends on R&D and brand development, which according to statistics totaled at least $800 million in 2005. Rather, they count each iPod twice: when it arrives from China, and when it sells. That, in effect, reduces Apple, one of the world's greatest innovators, to a reseller of imported goods (Mandel et al. 2006). The same goes for Sony-Ericson or any other big cooperation within Sweden as well. But neither IFRS nor US GAAP allow recognition of internally generated brands, which is a big debate topic in accounting now.

One of the reasons for not recognizing internally generated brands is that it is claimed that it can not be separately identified. Basu & Waymire do not believe that intangibles can be separated from tangibles in the production of wealth or that companies could claim the right to intangibles valuable to them. In a thrilling article they are illuminating how intangibles are created and used in modern societies. The main point is that it is forces such as tolerance, educational reforms, appropriate legal institutions, government support of networks and the like on the macro-level that stimulates the development of knowledge, culture and ideas that eventually are transformed into profitable products and services by innovative organizations. But these processes are complex and it is not obvious that intangibles can be valued or even separable identified. Moreover, many of them are common goods shared by all members of society and can therefore not be controlled by individual companies that can claim them as
theirs. They claim that this is the case for the most important intangibles, as social capital and education (Basu & Waymire, 2008).

In March 2000, the head of the EU countries met at Lisbon Summit and agreed on making the EU “the most competitive and dynamic knowledge-driven economy by 2010” which was promoted under the heading “Lisbon Strategy”. In particular, it was agreed preparing the transition to a knowledge-based economy and society by better policies for the information society and R&D. The necessity of investing on R&D was emphasized by setting the target of having minimum 3% of R&D investment in GDP (Lisbon European Council, 2000). As of writing this article, it is exactly a decade after the Summit in 2000, and evaluating the results shows that economy-wide, the EU has spent, on average, only 1.8 percent of GDP on R&D this decade, compared with 2.7 percent for the US and 3.2 percent for Japan (Figure 1). Among the EU member states, only Finland and Sweden have total R&D expenditure above 3 percent of GDP, followed by Austria, Denmark and Germany at around 2½ percent (Annex 1). Although the results of Sweden were among the best in EU, the Swedish Prime Minister Fredrik Reinfeldt concluded that the overall strategy was not successful. "Even if progress has been made it must be said that the Lisbon Agenda, with only a year remaining before it is to be evaluated, has been a failure," he wrote in a joint article with Finance Minister, Anders Borg (Euractive, 2009).

**Figure 1.** Business R&D expenditure (percent of GDP), 1995-2007

Source: Helmers et al. 2009
Intangible investments of firms

In their book Corrado, Hulten & Sichel (2005) discuss the impact of R&D investment in NIPA (National Income and Product accounts). They argue that by treating R&D as expenditure, not an investment, NIPA underestimates R&D’s contribution to the national growth. They also discuss that capitalized R&D increases the level of real and nominal GDP and positively impacts the income side of the national accountants (GDI) in double entry system. Following this discussion, in their latest article, Corrado, Hulten & Sichel (2009) suggest how intangibles may be incorporated into the conventional GDP/GDI national accounting identity. The key to this extension is that the flow of new intangibles must be included both on the product side of the accounts and on the input/income side via the flow of services from the intangible stock (a point sometimes missed in the literature on R&D):

$$PQ(t)Q(t) = PC(t)C(t) + PI(t)I(t) + PN(t)N(t) = PL(t)L(t) + PK(t)K(t) + PR(t)R(t)$$

Here, aggregate output is denoted by Q, consumption by C, tangible investment goods by I, intangibles by N, and their respective prices by P with the appropriate superscript. On the input side labor L, tangible capital K, and intangible capital R represent the inputs that are allocated to the production of all three output components. This formulation is clearly different from the current national accounts’ definition of GDP, which treats intangibles as an intermediate input to the production of C and I. Treating intangible expenditures as investment also makes economic sense from a business strategy point of view. Outlays on software, R&D, advertising, training, organizational capital etc., are critical investments that sustain a firm’s market presence in future years by reducing cost and raising profits beyond the current accounting period (van Ark et al. 2009).

In the value relevance research it is claimed that another problem is the undervaluation of a firm’s intangible capital by investors. Here, the main emphasis is on the internally generated assets and R&D expenditures that don’t get reflected in financial statements. Although, a skilled and qualified work-force, strong customer relationship, brand development and all other kind of internally generated intangibles generate most of the corporate growth, yet there are some research showing that investors in the market usually misprices the shares of the
intangible-intensive firms (ref ?????). We can assume that the enterprise’s performance, as reflected by earning, is generated by its physical and financial assets, enabled by intangibles. According to Lev, one of the well recognized authorities on intellectual capital, the value of intangible capital is derived by subtracting the average contribution of physical and financial assets from earnings. What remains, is the contribution of intangible assets to the company’s performance and that provides the basis for the valuation of intangible capital. Thus for example, if the annual operating earning of the firm is 10,000 EUR, and its physical assets are valued at 80,000 EUR, with 10% of return, assuming there are no financial assets then 2000 EUR (10,000 – 80,000*10%) would be the contribution of intangible assets. Lev calls it intangible driven earnings. Intangible capital is then calculated by computing the present value of the forecasted stream of intangible-driven earnings. So finally we can calculate the comprehensive value of an enterprise in order to evaluate its stock prices. Comprehensive value would be the net value of physical and financial assets plus the missing part –intangible capital. By dividing the market value to comprehensive value we get the percent of under/over valuation (Lev, 2004).

Defining intangible assets; The nature of and classification of intangibles

In order to classify something one has to have a purpose of the classification. Classification criteria can never be true or false, only more or less useful according to the suggested purpose of the classification (Rosing 1978). In accounting, items have been classified for a number of reasons. The purpose of the categorization into current and non-current assets has been to help users to calculate measures like liquidity and solvency. Another purpose for classification in accounting has been to discuss measurement solutions since different measures are used for different categories of assets, i.e. historical cost used for non-current assets, fair value for financial items and so on. Is there any stated classification purpose in those articles classifying intangibles? Walker (2009) concludes that it is difficult to find any stated purpose for classification in many papers that do classify intangibles. However, one purpose seems to be for management purpose. In order to manage successfully one has to make visible and put labels on different resources; one way to do that is to put them into different categories (Kaufman & Schneider, 2004).
But even so, there are many proposals for intangible assets classification. Lev (2001) writing in the tradition of intellectual capital classifies intangibles into four groups:

1. Discovery/learning; ex R&D
2. Customer-related; ex brands, trademarks, distribution channels
3. Human-resource; ex. Education, training and compensation systems
4. Organization capital; structural organization design, business processes, unique corporate culture

One fashion concept much used and discussed is the concept of ‘intellectual capital’. Some authors (Lev 2001, for example) do use this concept as synonymous with ‘intangibles’. In a literature review conducted by Kaufmann & Schneider (2004) it was concluded that there is no well-established generally accepted definition or classification of intellectual capital. The pioneering work by Edvinson & Malone (1997) which classified into two categories: human capital and structural capital has strongly influenced other researchers. However, it seems like most researchers in this tradition now classify into three categories; one related to employees that is most often called human capital, a second related to internal processes and structures most often called structural capital or organizational capital, a third related to customers called external structure, relational capital or customer capital (Kaufmann & Schneider, 2004). However, as Kaufmann & Schneider (2004) concludes the literature in this line of research has generally not specified a clear purpose for writing about and classifying intangibles. They found the categorization to be very abstract and the categories quite broad.

Wyatt (2008) that made an ambitious literature review on research about value-relevance organized the 96 studies reviewed according to the following classification:

**Technology resources**

1. R&D expenditures and related IP

**Human resources**

2. Human capital

**Production resources**

3. Advertising, brands and related IP
4. Customer loyalty
5. Competitive advantage
6. Goodwill
In financial accounting much more refined classifications have been made. As already stated these also mostly are related to a clear purpose either of informing external users or for measurement purposes that can as well be driven by other purposes, for example tax-driven. For a classification to be useful and accurate there should rather not be any overlaps between the different categories. The FASB classification can be seen as particularly helpful in that respects as well as in being more refined. FASB has suggested classifications into the following seven categories:

- Technology-based Assets
- Customer-based Assets
- Market-based Assets
- Workforce-based Assets
- Contract-based Assets
- Organization-based Assets
- Statutory-based Assets

Scholars, standard setting boards and researchers have been defining intangible assets in many various ways according to the way they understand the nature of these assets. Baruch Lev, for example, classifies assets into 2 groups: “rivalry” and “not-rivalry”. He claims that physical and financial assets are rival assets because different users rival for the use of these asset. These assets can not be used at the same time in many places. He brings an example of airlines companies, exemplifying that they can assign certain airplane to only one route at a time. And the financial capital invested in an airplane also cannot be assigned to another route. Consequently, he calls intangible assets “non-rivalry” assets. Because many users can use these assets at many different cases. Talking about airplane examples again, reservation system is an intellectual property of a company, but it can of course be used by 10, 100, 1000,000 people and more and the same time (Stepjen, 2001).

It seems easier to classify intangibles than to decide on their nature, are intangibles actually assets? According to FASB’s asset definition, which is not much different from the IASB’s, asset is “probable future economic benefit obtained or controlled by a particular entity as a result of past transactions or events”. (Statement No 6, paragraph 25). In their paper, Edmund Jenkins & Upton (2001) discuss whether intangible assets fall under the definition of assets. First they discuss whether well trained, happy workforce is a source of future economic
benefit or not. The answer here is both yes and no. Yes because those factors are important to a business, no because there is a big control issue over the benefits from these assets. Because an entity can not fully control the economic benefit that flows from workforces.

Secondly they talk about the criteria of “resulting of past transaction”. In the case of acquiring patent through purchase it is easy to identify the “past event” or “transaction”. But when it comes to developing certain drug within the company that takes many years, then it gets hard sometimes impossible to identify exact “past transaction” which generated that intangible asset (Jenkins & Upton, 2001)

In studies around regulation different purposes of accounting and thus for the measurement and classification is discussed. A general view is that, today standard setters mainly emphasize that the purpose of accounting is to give information to the investors. However, it is not self evident that investors should be the main users of accounting. Holthausen & Watts (2001, p 25) even claim, that FASB do not give any primacy for equity valuation. Jones & Dean think that what is needed in order to help standard setters in their continuing reflection over standards are studies that explore the information needs of not only investors but also by lenders and creditors which they think have not been paid accurate attention to (Jones & Dean, 2009). Lonergan is very critical to the standards on intangible assets and think that the whole issue is neglected. He describes it as a “hotchpotch” (Lonergan 2009, p 391).

Internally generated goodwill is treated differently from acquired goodwill since the former cannot be recognized even though it is conceptually similar to the latter. But at the same time internally generated assets are in practice often a reason for not writing-down for impairment. He is also very critical of allowing the weak concept of ‘value-in-use’ when testing for impairment and he claims that deficiencies in other standards are sheltered by goodwill as a residual concept. He thinks that standard setters have neglected the whole issue because of measurement difficulties and because of the resistance from companies regarding goodwill amortization (Lonergan, 2009). It may also be that they hesitate about the purpose of accounting and therefore standards will be a mix of different purposes resulting in inconsistency. This inconsistency is at the center of the debate about regulating intangible assets and it will be demonstrated in the following sections that this is a main problem for
standard setters. A number of descriptive studies illustrates the inconsistencies and a number of normative studies claim to have the solutions to the problem\textsuperscript{2}. We will review them here.

**Descriptive studies on intangibles regulation**

Regulation on intangibles around the world looks quite different with the most conservative view in the USA that does not allow capitalization (with the exception of some software investments). In Australia up until 2005 when Australian rules were replaced by IFRS-informed standards, the standard setters had a very flexible and permitting view, even accepting capitalizing internally generated intangible assets. This practice was seen in Australia during 1990’s and the beginning of 2000’s (Bradbury, 2009).

Powell (2003) has investigated how intangibles are regulated in different countries and found that policy is very different but he believes that the IASB will sort things out and that the differences will disappear eventually.

The complexity of the issue for standard setters is clearly demonstrated by the investigation conducted by Stolowy & Jeny-Cazavan (2001) that illustrated a considerable lack of consistency among 21 national and two international standard setters. The study of intangible assets’ definition and recognition criteria in 23 national and international standards showed that there is no any generally accepted conceptual framework. According to the authors the reason for such inconsistency in international level arises from the fact that national standards themselves do not prescribe just one treatment for each type of intangible. They argue that the lack of international homogeneity itself arises from a lack of national homogeneity.

Studies about the development of standards have been conducted in a number of ways. One way is to simply record the content of and change of content in standards about intangibles. Despite the numerous claims for change the standard setters have continued their conservative stance against capitalization. There are several reasons for this resistance among standard setters. According to standard setters own explanations intangibles are soft assets that are too difficult to measure and too difficult to identify. Studies on the view on financial

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\textsuperscript{2} In accounting, more so than in most other disciplines, there are a lot of normative/prescriptive studies. It could be explained with that accounting is a practical discipline, we ought to find solutions to account for transactions.
analysts and investors also tend to conclude that these users do not want them to be capitalized. Many even claim that they disregard them when making their analyses.

In the literature (Harding & McKinnon, 1997) discussing accountants as a profession it has been claimed that auditors may like to make professional judgments but that they do not like standards that are vague, which seems to be a little bit in conflict with other professions that can accept vagueness to a much greater extent (Abbott, 1988). This is a very interesting question that needs more attention. How strong or weak is the position of the accounting profession vis-a-vis for example the big companies? Authors like Zeff has given us many stories about the reversals standard setters have been forced to undertake as a result of lobbying and inference from both companies and state authorities on their behalf. Chee & Sharp (2005) claim that it is “a mixed power system”, i.e. no actor has the full control of the process but the preparer group has significant influence. What effect does the power balance have for the production of accounting standards and for the end result of giving information that is useful for its users? Does resistance from preparers affect the implementation of standards thus adding to the complexity of harmonizing and developing accounting? These are interesting questions from a regulatory perspective.

Since it has been so difficult to regulate intangibles companies have started to experiment themselves with different kinds of reporting techniques. Voluntary disclosure has particularly on intangibles been quite extensive. Boesso & Kumar (2007) investigated the drivers of voluntary disclosure and found, with empirical evidence from Italy and the U.S.A., that management style, the existence and relevance of intangibles and market complexity were all factors that could be related to the volume as well as the quality of voluntary disclosure. However, the method they used was to look for the argumentation given by management themselves in the annual reports and it can be discussed how valid the results are.

**Management choice of accounting methods**

Wyatt comes to the conclusion that the choice (if available) to capitalize intangibles is based on insights into the strength and length of the technology cycle, as well as property-rights issues affecting the firms operation rather than being based on other contracting and signaling factors as claimed by the FASB. From this investigation she concludes that standard setters
should not limit the possibility for the companies to record intangibles since this should result in less informative annual reports (Wyatt, 2005).

Companies have been more and more reluctant to amortize goodwill. When standard setters have regulated and forced companies to amortize goodwill some of them have capitalized intangible assets to compensate for the impact on reported earnings of the amortization (Wines & Ferguson, 1993; Lonergan, 2009 both of them referring to Australia). Also Wrigley (2008) stresses the problem with managers that do not want to amortize goodwill.

**If and how accounting solutions affect management behavior**

Intangibles, particularly brands, have also been discussed in marketing journals. A particularly interesting question is what the consequences will be on managements marketing decisions of the restrictive view of accounting standard setters. Wood (1995) made a review for the period 1980-1995 ..... 

Ittner (2008), discussing earlier research, reaches the conclusion that there is a need for more studies about what the consequences will be on management performance with implementing different practices

Kelly (2007) in an experiment investigated if and how the information on intangible assets as compared with tangible assets affected management decision quality and concluded that the advantages of disclosing information on intangibles varied based on the firm’s reliance on tangible versus intangible assets but also depending on the rewarding system. 

**History of IAS 38’s development**

This section will look through the history of IAS 38, examining the revisions and amendments to it. We aim to see what have been developed since 1998 (first IAS 38 to be issued) which issues have been addressed by the Board and which critical aspects that still needs to be looked through or perhaps amended.
Although IASC (predecessor of IASB) started a work on developing a standard on intangible assets already in 1989, it wasn’t until 1993 that the project became the priority in the committee’s agenda. After analyzing hundreds of comment letters on the exposure drafts E50, E55, E60 and E61 from over 20 countries, the board approved IAS 38, Intangible Assets in July 1998. One of the main discussion topics on these comment letters were *internally generated intangible assets*. The controversy relating to internally generated intangible assets embraced whether there should be:

- A requirement to recognize internally generated intangible assets in the balance sheet whenever certain criteria are met
- A requirement to recognize expenditure on all internally generated intangible assets in the balance sheet as an expense
- A requirement to generally recognize expenditure on all internally generated assets as an expense, with certain specified exceptions
- An option to choose between the treatments described in (a) and (b)

The Board rejected a proposal for an allowed alternative to recognize expenditure on internally generated intangible assets as an expense immediately, even if it meets the requirement of an asset due to the reason that “a free choice would undermine the comparability of financial statements efforts of the Board in recent years to reduce the number of alternative treatments in IAS” (Basis for Conclusion, paragraph 24).

The Board agreed on classifying internally generated intangible assets into 2 phases: a research phase and a development phase. Exclusively only intangible assets arising from the development phase could be recognized, excluding internal generated brand, masthead, publishing titles, customer list and items similar in substance. The expenditure on the research phase of a project should always be expensed. To address the comments from E60, the board also added the definition of “research”, “development” and examples of typical research and development activities to the standard. Although many commentators on E50 supported “separability” as necessary criteria to assist an entity to indentify intangible assets, the Board rejected the proposal to add “separability” criterion for internally generated assets (IAS 38, paragraph 12, 1998) (Basis for Conclusion, paragraph 24).
But later on, in 2004, IASB did some revisions to IAS 38, which also included considering intangible assets to be identifiable if it is separable or arises from contractual or legal rights. (KPMG, 2004). The revision of the same year also included removing “held for use in production or supply of goods or services, for rental to others, or for administrative purposes” part from the definition of intangible assets (IAS 38, paragraph 1, 1998). The revised IAS 38, as well removed the rebuttable presumption that the useful life of an intangible assets would not exceed 20 years. The requirement to test intangible assets with a useful life exceeding 20 years for impairment annually has also been removed; instead tests for impairment are carried under the general rules of IAS 36 (KPMG, 2004). The Board also agreed modifying the criteria for permitting an intangible asset’s residual value to be other than zero. However, the Board decided to delegate this issue to the Australian Accounting Standards Boars (AASB) for consideration as part of the research project on intangible assets that AASB was undertaking on the IASB’s behalf (IASB, 2004).

In May 2008, the Board amended IAS 38 according to the Annual Improvement to IFRSs 2007. This time main changes included clarifying the circumstances in which an entity can recognize a pre-payment asset for advertising or promotional expenditure. Mail order catalogues were distinctively identified as a form of advertising and promotional activities (IAS plus, 2008). The Board agreed that:

- To modify the proposed change to require that, in case of supplying goods, an entity should recognize an expense when it has the right to access those goods
- To add an explanatory paragraph that when an expense should be recognized depends on the terms of contract to supply related goods or services.

The Board agreed that in case of services, the entity recognizes the expenses as the service are performed in accordance with the term of the contract. In case of goods, a right or access is received when the goods have been completed and the supplier in accordance with the terms of the contract and have been available to the entity. In order to explain the basis of conclusion on not recognizing promotional and advertising material cannot be recognized as an assets, IASB put forward an argument that “it has not alternative” (IASB, 2008). No any revision was made to the recognition criteria of internally generated assets.
And finally, in April 2009, IAS 38 amended for *Annual Improvements to IFRSs 2009*. The main changes here were amendment to paragraph 36 and 37 of IAS 38 clarifying requirements regarding accounting of intangible assets acquired in a business combination, stating that “An intangible asset acquired in a business combination might be separable, but only together with a related contract, identifiable asset or liability. In such cases, the acquirer recognizes the intangible asset separately from goodwill, but together with the related item.”(IAS 38, paragraph 36, 2009) (IAS plus, 2009). Also the current amendments clarified the description of valuation techniques commonly used by entities when acquired intangible assets through business combination do not have an active traded market (IAS 38, paragraph 40, 10, 2009).

We tried to summarize the main amendment to IAS 38 since 1998, but there are of course many more issues that are still debated and needs to be clarified. We observed that some issues such as the criteria of “separability” was rejected by the Board first time when presented, but later on, after few years it did get through the Board’s approval. One of the main debate topics

Perhaps, the view of commentators of exposure draft is very much influenced by the way they see the nature of intangible assets and research & development expenditures which we are going to address in the next section.

“...it is interesting to note that the IASB, in December 2007, considered a proposal to instigate a project dealing with accounting for *identifiable* intangibles. As such, it had a relatively limited scope in any event. The IASB chose not to instigate such a project at the time, suggesting that the issue, while seen as potentially important, was not important enough to expend scarce organizational resources on. Nor does the IASB appear to be considering a broader scope project. Such decisions appear to be broadly in unison with the facts in the U.K. at least.” (Dedman et al, 2009, p 339)

**Normative studies**
It is easy to understand that when valuation of equity in the accounts differs from the market capitalization of equity the debate starts about the reason for this difference of book-to-market-value. This became particularly evident during the 1990s with the growth of internet firms whose main resources are different kinds of intangible resources. Many then concluded that it is something wrong about accounting that can not map market reality and then it is close at hand to become prescriptive suggesting solutions about how accounting could and should change and become “modern”. Many argue that the difference can be explained by the existence of resources that are not correctly recognized as assets in the balance sheet and suggest the capitalization of such “assets”, among them many in the intellectual capital tradition but also some traditional accountants. Australians, both in articles (for example Tozer & Hawkes, 2001) and in comment letters to the IASB, have in particular been critical to standards not allowing the capitalization of intangibles. The Australian critical views can be explained partly by the earlier existence of standards that allowed such capitalization and the change of such practice when Australia decided to change their standards to be more in line with IFRS.

Not only practitioners but also many academics have normative views about whether or not intangibles should be capitalized. As mentioned above a specific line of studies try to prove that the existence of intangibles can explain abnormal performance of companies and therefore argue for that more intangibles ought to be capitalized. Individual studies investigate the value relevance of information about particular groups of intangible assets such as R&D, human capital, organizational capital, internally generated brands etc. Information is said to be value relevant if “it is associated with investors’ valuation of the firm as reflected in the firm’s stock price” (Wyatt, 2008). In order to investigate the value relevance accounting data is correlated with some market value of equity as for example reflected in stock prices. There are a number of methodological problems with such an approach. First, there is only evidence of a correlation, but not much discussion about interfering factors. Second, as Holthausen & Watts (2001) have critically pointed out, the studies lack in theory about what causes the value creation processes. Third, investors may get relevant information from other sources and there is no evidence that investors actually use accounting information (Wyatt, 2008).

“So, what policy implications can be drawn from these value-relevance studies? Actually it is difficult to draw any conclusions since what is tested is only a statistical association that is not
explained by any theory about the underlying links between accounting, value and standard setting” (Holthausen & Watts, 2001).

Basu & Waymire (2008) do not believe that the difference of market and book value could be explained by the existence of non-recognized intangibles in the book accounts of companies:

“…we suggest that a more plausible reason for the variation in market-to-book ratios over time is changes in the value of non-accounting economic intangibles, such as improvements in government functioning and the impact of deregulation.” (Basu & Waymire 2008, p 184)

The issue of the existence and recognition of intangibles has of course been normatively discussed a lot also by traditionally trained accountants. As Walker (2009) responds, the view that the reported net assets of firms should equate their market value is very questionable and he finds that the proponents for capitalization do not deliver any explanation why balance sheet values should be aligned with market value. Referring to a number of authoritative accounting classics (such as Paton, 1922; Canning, 1929) and also to standard setters (particular reference to the Australia’s Accounting Standards Review Board, Release 101, 1985) he demonstrates that this view has never been the common view among accountants. If accountants attribute values, it will, under the assumption of a going concern, be to individual items of assets or liabilities and not to value a ‘business’ as a whole. He concludes by writing:

“From this perspective, a gap between market capitalization and reported net assets value is not a problem – it is simply a phenomenon” (Walker 2009, p 304)

Penman (2009) has very much the same view as Walker. Penman very clearly stresses the role of accounting as giving information to analysts about what we know and to not speculate about values or the existence of intangibles. He points out that the values of intangibles and other assets should be ascertained from the income statement. When the resources of the firm have jointly produced value it will be seen in the income statement when the firm makes a sale. Therefore, he is also critical to fair value of tangible assets unless they are separable (stand-alone) and has a market. Intangible resources are there to produce value jointly with tangible assets. It is not until brands, knowledge and marketing works together with production facilities that the firm creates value. Therefore, according to him, listing an intangible asset on the balance sheet is suspect and it is even more suspect to put a value on it.
and there is no need to do that. The analyst can, and would most likely like to, perceive the value of such assets from the income statement. Skinner (2008) has the same view and stresses that information about how well the management performs in selling goods and services above cost will get lost if we include non-realized value increases in the income statement. He claims that most analytical methods used is based on the income statements with historical costs (Skinner 2008, p 193). Wrigley (2008), a financial analyst himself, stresses the importance of both measures but that they are kept separately:

“What is important is that we understand the operational transactions that have taken place in order that we identify what profits the management have actually earned utilizing the operational capital that they have invested, organically or by acquisition. This is the ‘operational stewardship’ role of management ‘Financial stewardship’ is slightly different. In this case we are looking at how management have performed with respect to the financial exposures of the enterprise as these can also impact on shareholder value. I am generally supportive of using fair value for these items, which would include pensions.” (Wrigley 2008, p 259).

Writers who claim the existence of intangible assets such as Lev et al (2009) that claim the existence of organization capital in firms like Microsoft, Intel and Dell do so by estimating through the income statement that these firms have had very good earnings performance. It is just not necessary to put up this item in the balance sheet (Penman, 2009). As Johnstone (2009) claim, accounting is of most value to the analyst not trying to speculate on the value of individual items but when it takes on the signaling role and is different to the market valuation. The phenomenon of herding is well known in the finance literature regarding professional analyst behavior, i.e. experts tend to follow each other even if the evidence is weak. In these situations accounting can be of value by being independent, i.e. being based on other signals and measurements than impounded in the market prices, but that can inform market prices (Johnstone, 2009; Nissim & Penman, 2008).

Skinner (2008) arguing against capitalization or disclosure of more information on intangibles stresses that arguments for reform of standards is very weak. He does not agree with them that claim the difficulties for innovative, high-technological and knowledge-intensive firms to attain financing. He agrees with Lev that the cost of capital for companies has increased but disagrees with his explanation that this is related to the lack of information
about intangibles, instead his explanation is that partly because of the growth of the stock markets businesses today are riskier since companies listed today have higher growth, less profits and lower probability to survive:

“In other words, these results simply reflect the fact that investors, as we would expect, believe that expenditures on intangibles are riskier than other investments. There is nothing surprising here – indeed, this is precisely why the current accounting model does not recognize these expenditures as assets.”
(Skinner 2008, p 195)

Arguing against capitalization can also be made with reference to that companies that have been considered to have big intangibles that in some cases even have been accounted for, have had to eventually write these down. In some cases they have went from being success stories to completely worthless businesses – such as Enron and Worldcom as the most extreme examples. Another example is when investment banks that were considered to have big intellectual capital that could explain their superior earnings dramatically failed with the start of the global financial crisis some years ago. When they could not refinance their borrowings the perception of superior management had to be modified. It may be experiences like these that are the reason that many investors and financial analysts disregard capitalized intangibles.

Is disclosure the solution?

Other ways to argue for not capitalizing intangibles is that disclosure is a better way to inform about intangibles. The debate then will be about whether or not such information will be disclosed voluntarily as a result of market incentives or if there is a need to make it mandatory by regulation. Skinner (2008) does not believe in mandatory rules because he claims that measures must be different in different industries (or even companies) and therefore difficult to standardize. If standards are written they must be on a high level of generality to cover the wide variation necessary and because of that we will have implementation problem with a risk that preparers circumscribe the standards and make vague, uninformative disclosures (Skinner 2008). At least in the U.S.A. there is evidence that when the FASB issues standards that are flexible enough to give the companies discretion there is a significant level of non-compliance (Marquardt & Wiedman, 2008).
Skinner (2008) believes that companies will oppose standardization because of proprietary costs. However, he claims that companies, if they find information relevant, will voluntarily disclose it. Dedman et al seem first to agree with Skinners (2008) conclusion, with evidence from the USA, that there is weak evidence for the need to regulate disclosure of additional information on intangibles but, with the example of two scandal cases in the biotechnical sector in the UK, they claim that market incentives may not only have positive effects but adverse effects tempting some companies to make overly favorable disclosures or fail to disclose bad news leading to over-pricing. Therefore, even if voluntary disclosure seems to work in most cases these exceptional cases calls for the need for disclosure regulation, at least in the studied area of R&D (Dedman et al, 2009, p 327). In an international setting argumentation for regulating disclosure can also be based on that voluntary disclosure is so unevenly spread. In some countries, like for example the Scandinavian countries, there is a long tradition of voluntary disclosure (Artsberg & Arvidsson, 2007) but in other countries, like for example Ireland (Brennan, 2001) there is little interest from the preparers to disclose voluntarily. Wyatt (2008) points toward the bewildering number of alternative measures and models as deterrent for not having the issue regulated and she would like to have more detail information on separate items than is provided voluntarily.

However, some do not believe that disclosure, either voluntary or mandatory, is the appropriate solution. Luft & Shields (2001) argue that it does matter whether information about intangibles are disclosed or capitalized. Barth (2003) and Wyatt (2008) claim that disclosure is not an alternative that can substitute for recognition since the two different ways to provide information have different effects on the share prices.

Discussing some technical issues related to the valuation/capitalization of intangibles

As obvious from the review on the normative articles above, most of the different views regarding if and how intangibles should be regulated can be explained by different views on the purpose of accounting. Such a disagreement is of a policy character and not possible to solve by scientific methods. However, science may be helpful in producing knowledge that
can form the basis for conclusions by policy makers. Some other of the disagreement can be explained by lack of knowledge around technical issues. These issues may be easier to investigate and the contribution of science will be of another sort. We will in this section discuss some of these technical issues around where there is disagreement.

**Is it possible to identify and separate intangibles?**

The question in the headline has been particularly discussed regarding internally generated intangibles such as brands. The topic has also been discussed in marketing. Egan & Guilding (1994) addresses a number of problems management will face trying to assess the value of brands, and discusses whether there are management processes creating and sustaining brands that can be identified.

**Is it possible to reliably measure intangibles?**

Most of the arguments against capitalization has referred to the non identifiability of intangibles as the reason for not capitalizing them. However, Lonergan (2009) believes that even intangible assets possible to identify are difficult to measure reliably. He mentions the following reasons for that:

1. They are not frequently traded on a stand-alone basis and therefore no active market is created for them that can be used to assess the value of them in the balance sheet
2. Many of them are unique and therefore not able to assess the value of
3. Appropriate valuation methods are not generally understood
4. Since many of them overlap it is risk to count them double or triple etc
5. Since they are mutually interdependent one may not have a value if another fails
6. Values may be attributed to the wrong asset because of confusion about where the profit comes from
7. Historical cost is not a reliable indicator of value (Lonergan, 2009, p 393)

**Does intangibles have future economic benefits?**

Besides the two earlier more technical questions about identifying and measuring intangibles that are both related to the question about reliability the very basic question whether or not
something should be capitalized lies in the answer to the headline question: Does intangibles have future economic benefits? This issue of relevance has particularly been researched by the value relevance studies. These studies try to find out if the existence of intangibles can explain “abnormal earnings” and thus according to this view ought to be capitalized, or at least information about them should be disclosed in a standardized way. Studying whether a certain intangible asset has capacity to generate abnormal earnings for the firm is conducted through selecting proxies. The contribution of so called organization capital is, for example, studied through its contribution to revenue growth and its capacity to save operating costs (Lev et al 2001, 2009). Lev et al also concludes that organization capital proxies for ‘management quality’ since it is the management that are responsible to build up and nurture this capital. Thus they normatively suggest that the board uses organizational capital as a measure in compensation decisions about the management (Lev et al, 2009, p 277).

Some of these studies are empirical investigations but there are also many articles discussing methodological issues related to the possibility to measure and make conclusions about abnormal earnings. A special overview and critical assessment of the evidence in these studies are delivered by Ittner (2008). He concludes that:

Although the bulk of these studies provide at least some evidence that intangible asset measurement is associated with higher performance, many are limited by over-reliance on perceptual satisfaction or outcome variables, inadequate controls for contingency factors, simple variables for capturing complex measurement practices, and the lack of data on implementation practices.” (Ittner, 2008)

Wyatt (2008) reviewing 96 empirical studies are coming to the same conclusion. However, she claims that there are the following evidence regarding specific topics:

- Goodwill is generally overestimated. Not the least because of the new standard with impairment testing.
- It is difficult to assess value relevance of research and development only on the basis about how much is spent. There is need for information about successful and not successful projects
- Both for customer loyalty and for competitive advantage (see her classification in earlier section about definition) there are limited evidence, mainly because of a lack of theory about how value is created
In order to methodologically improve this kind of studies there are first of all a need for a theory about what creates value and how value is created. In order to formulate such a theory there is need for internal information. However, it may not be easy for management themselves to assess the value of expenditures on intangibles. The difficulties relate to technical aspects on products and processes and to what extent assets and routines are standardized and predictable (Wyatt, 2008). Another factor is the strength of ‘property rights’ (Dosi, 1988).

The framework for standard setters are based on both relevance and reliability. What ‘value relevance studies’ investigates is in the first place relevance. Wyatt (2008) also discusses the concept of reliability and how it can be measured in value relevance studies and it seems that she is drawing the conclusion that information is reliable if it is likely to be value relevant. This conclusion can not be in accordance with the definition of reliability in the framework of standard setters. Overall, Wyatt is negative about the evidence so far in the value relevance studies and the possibility to methodologically measure it:

“However, there are limits to what can be learned about reliability… Overall, it is difficult to obtain robust tests of reliability and addressing this gap is a key area for future research.” (Wyatt 2008, p 218)

Finally, there is of course the question about how much uncertainty one can take. One can not be 100% certain about anything, a fact that Wyatt expresses comparing intangibles with tangibles:

“In fact, all of the firm’s investments, tangible and intangible, are uncertain by definition, since investment expenditures are outlays made in anticipation of future benefits (Wyatt 2008, s 218 with reference to Fisher, 1930).

However, as Wyatt also notice there is a difference between intangibles and tangibles. Investments take place in intangibles earlier than in tangibles and are thus associated with higher risks (Wyatt 2008, s 221).
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