

Issues Concerning the Effects of Overstatement and Underassessment of Intangible Assets - Application Particularities

Gabriela Mangu (Giurea)¹, Monica Adriana Tegledi², Viorica Dindăreanu (Iuga)³

Abstract: The accurate assessment of the intangible assets is a significant challenge for most entities, regardless of the industry sector. However, situations can arise in accounting where intangible assets may be significantly detracted or overstated and we have chosen to present some of the possible effects of this phenomenon. In this sense, there were analyzed practical aspects regarding the financial statements' distortion through the overstatement and, respectively, the detraction of intangible assets, as these meant to be recognized in the financial statement and might influence the economic entity's financial indicators.

Keywords: intangible assets; overstatement; detraction; IAS; IFRS; financial statements; economic entity; prudence principle; indicators for measuring intangible assets

JEL Classification: M41 – Accounting

1. Introduction

Regarding the prudence principle, the accounting activity requires a degree of caution in applying useful judgements to estimates imposed by certain conditions of uncertainty, lest the assets and income might be overstated and liabilities and expenses would be understated.

However, it is known that the exercise of prudence can allow neither the establishment of hidden reserves or excessive provisions as well as the intentional

¹ PhD, ValahiaUniversity Târgovişte, Romania, Address: Str. Aleea Sinaia 13, Targoviste 130004, Romania, Corresponding author: gabriela.giurea05@gmail.com.

AUDOE Vol. 18, No. 6/2022, pp. 20-38

² PhD in progress, Valahia University Târgoviște, Romania, Address: Str. Aleea Sinaia 13, Targoviste 130004, Romania, E-mail: monica_tegledi@yahoo.com.

³ PhD in progress, Valahia University Târgoviște, , Romania, Address: Str. Aleea Sinaia 13, Targoviste 130004, Romania, Corresponding author: vicavica50@yahoo.com.

understatement of assets or income, nor the identical overstatement of liabilities or expenses, due to the lack of the financial statements neutrality, thus losing their quality of being reliable (OMFP nr. 1802/2014)¹. From a theoretical perspective, the principle of prudence is very well assimilated, but when applied under conditions of uncertainty, it requires the maximum use of the accounting professional's judgement. It is obvious that it is much more difficult to make a correct price assessment for things that lack substance and physical form, such as: copyrights, patents or trademarks. The correct assessment of such assets is not optional, but rather important.

The failure of representing the intangible assets incorrectly, exposes the entities to risks of takeover or exploitation, to offering below the market price, as well as to understatement and acquisition of strong brands.

The phenomenon has serious implications for entities and their shareholders, representing a particular problem for emerging markets. In extreme cases, due to the undervaluation of intangible assets, entities may end up being accepted by the foreign buyers. Therefore, the accurate assessment is essential for the management of all shareholders and borrowers.

The informational detail in financial reports is important for investors' decisions about the idea and proportion of investment. For example, according to a report carried out in 2015 by the Chartered Institute of Management Accountants (CIMA) and Brand Finance, on Great Britain, it appears that British companies that fail to correctly assess the value of intangible assets, could be undertaken by the public takeover bid. It should be noted that in UK the intangible assets represent almost 64% of value for companies owning intangible assets (see pharmaceuticals), aerospace and engineering and luxury goods.

2. Literature Review

Currently, the intangible assets can be defined and presented both through the vision of International Accounting Standards, of Financial Reporting Standards, as well as in accordance with the International Assessment Standards. The accounting policies approved by the directors or by those charged with the entity's management, classify assets as non-current assets taking into account the reason of creating them. The OMFP no. 1802/2014² responsible for the approval of the Accounting Regulations regarding individual annual financial statements and consolidated annual financial statements, provides that immovable assets include only those assets intended for

¹ OMFP no. 1.802/2014 for the approval of the Accounting Regulations on individual annual financial statements and consolidated annual financial statements.

² OMFP nr. 1.802/2014 for the approval of the Accounting Regulations on individual annual financial statements and consolidated annual financial statements.

continuous use, for a period of more than one year, generating future economic benefits, aiming at improving the carried out activities of entities.

The future economic benefits resulting from an intangible asset represent the ability to support, directly or indirectly, cash flows or cash equivalents to the entity (treasury assets) and can be in the form of cost savings or revenues got from the sale of goods or services. These can be obtained from the existing synergy between the acquired identifiable assets or those that cannot be identified individually in the financial statements. The intangible assets are referred to as identifiable, non-monetary assets without material support, would be used in the production process or in the provision of goods or services, for rental to third parties or in order to be used for administrative purposes. Intangible assets are represented by establishment expenses, research and development expenses, concessions, patents, brands, licenses, computer programs etc.

Nowadays, the intangible asset research has stirred up multiple controversies and has become a challenge for economic thinking, showing particular interest in the business field. We all know that the entities' success is due to an invisible force called intellectual capital.

The entities are the ones having changed the social life and the intangible assets are the ones that have changed and could change the entities even more. The International Assessment Committee - IVSC, through the General Standard of Valuation Practice - GN 4, and together with the International Valuation Standards (IVS) 2014¹, defines the intangible assets as non-monetary assets manifested by their economic properties, which have no physical substance but provide economic rights and benefits to its owner.

Therefore, they can be renamed as the existential resources of any organisation or economic entity, "incorporeal", "invisible", "intellectual" or "immaterial", revealing the knowledge existed in its various forms among human capital. The intangible assets contribute to the generation of income throughout their lifetime, providing the material basis for the activity of any entity, which is why some authors consider intangible assets to be highly efficient non-material investments that represent a real economic potential, which helps to develop and diversify the specific undertaken activities (Dumitrana & Chirata, 2011).

Ristea M. et al. (Ristea, Dumitru Ioanas & Irimescu, 2009) states that the intangible assets comprise all economic investment values which do not take the physical form of material goods, used in their own enterprise or entrusted to third parties for their use. Even if they do not take concrete material form, they are valuable to an enterprise and can be critical to its long-term success or failure. For example, a famous international company like Coca-Cola would not be so profitable if the brand

¹ ANEVAR, 2014, International Assessment Standards, Bucharest.

name were not recognised all over the world. The concept of intellectual property is also associated with these heritage elements.

This is a formal document of ownership, similar to a lease, which means that the ownership is a legal concept distinct from real estate, representing an actual asset but without concrete material form. Examples of intellectual property might be: the right to capitalize an idea, the right to recover a debt. The intellectual property includes the following categories of rights: to use, occupy, sell, rent, test (bequeath), donate, choose or exercise any or none of these (Gheorghiu, 2010).

3. Research Methodology

The research is substantiated by the theoretical approach including the presentation and development of the essential concepts necessary for cost analysis, performance evaluation and the perspective of intangible assets in the knowledge society and, above all, by the action-oriented approach, the analysis of documents (publications and specialised articles) and a wide range of information resulting from accessing databases (EUROSTAT, INS).

The participation method was also used in this research. All these methods, or models, were intended to achieve a highly predictive analysis of the trends and the actual definition, interpretation, reporting and expression of intangible assets in the entity's financial statements are heading to them.

The qualitative analysis of the collected information was carried out by the primary research but as well as by the secondary research (through in-depth study of recent literature, the European Union's report and international institutions or analysis of press interviews). The research methodology includes the documentation process as well.

For the current research, the documentation characterizes the analysis of information, documents and all reports provided by specialists in the field such as: accounting professionals, companies or professional organizations operating both in our country and abroad (see Spain, Italy, Norway, etc.). The relevance of the proposed scientific approach is highlighted by using the deductive and inductive research approach.

In terms of research typology, we can state that this research study combines theoretical, narrative and sometimes interpretative research with the quantitative one. The sources of research information are mainly represented by articles from specialised journals in the economic and financial-accounting fields, respectively, in auditing or valuation, specialized books relevant to the area of expertise, legislative acts, international accounting standards (IASs and IFRSs), international valuation standards (IVSs and GNs), official documents, press releases and other documents

issued by various national and international bodies working in the accounting sphere (IASB, IFAC, FASB).

4. Overstatement of Intangible Assets

In case of the intangible assets' overstatement, due to the fact that the company's actual base value is not well-defined, the investors of these particular companies may not receive the expected result, which leads to a low cost of capital and an influx of risky ventures. According to the accounting research, we have noticed that there is a tendency for markets to overestimate the amount of R&D expenditure (currently according to OMFP no. 1.802/2014 it is defined as development expenditure) comparative to the increase of derived earnings. According to Garcia-Ayuso (García-Ayuso, 2003), an effect of overestimating the value of intangible assets is expressed by the significant losses for investors, especially when the stock prices go back to their fundamental values. In the future revenue situation, the mismanagement of intangible assets creates a real business problem, says J. Gerzema (Gerzema, 2008). If the next cash flows cannot be generated at the level of budget expectations, then there will disappear the investor's confidence to raise additional capital, which may lead to the bankruptcy of many companies. The debt holders have no protection.

If a company fails, the tangible assets are typically available for conversion into cash. When intangible (illiquid) assets are predominant, according to Brady, Beach & Skomorucha (Brady, Beach & Skomorucha, 2003), there is no basis for a restructured company to move forward or cash to repay some of the company's debts.

Example: the collapse of "com" companies:

The "com" crash of the early 2000s is the best example of the effects of intangible assets' overstatement. The "com" companies typically do not own tangible assets, such as equipment, fixtures and inventory. Therefore, most of the asset value of the "com" companies consists of intangible assets, including intellectual property (copyrights, trademarks and patents), proprietary software or technology, domain names, licensing agreements, brand names, customer lists and data, and key employees (Brady, Beach & Skomorucha). Overpricing of stocks relative to the true value of the .com companies themselves is the main cause of the "com" crash.

In early April 2000, the technology powerhouse NASDAQ lost more than \$2 trillion. Only in the U.S., such as 93,079 Internet-related jobs were cut between 2000 and 2003, and 4,854 such companies were bought or closed (Cassidy, 2002).

The situation came to a head when the capitalists saw significant increases in determining the stock market value of "com" companies. Therefore, they moved faster and less cautiously than usual, choosing as risk mitigation the launch of numerous competitors, allowing the market to choose the winner. Even though some

of the new entrepreneurs had realistic plans and administrative capacity, most of them did not have these characteristics, but they had the ability to sell their ideas to investors, due to the new "com" concept.

The question on everyone's mind is why so many "com" companies have suddenly disappeared. According to studies, in 1999, the price-to-earnings ratios traded on .com stocks have averaged over 30. For example, the mighty Yahoo, at the time, had a P/E ratio of 571. Most investors at the time believed there was high growth potential. As Garcia-Ayuso noted, the initial overvaluation of high-tech companies' intangible assets and the immediate stock market crash had led to a dramatic social and economic impact. In conclusion, we can say that the overvaluation of intangible assets inflamed the "com" boom and was one of the factors that contributed to its eventual collapse.

5. Undervaluation of Tangible Assets

In our country the situation is quite similar. According to the ongoing research, we have noticed that referring to the treatment of intangible assets, the IFRS 3 (CECCAR, 2015) Business Combinations standard has several fundamental flaws, which, regardless of whether they are applied correctly or not, they make reporting inadequate and misleading for those uninitiated. The simultaneous fundamental flaws of this standard and its implementation undermine the credibility of accounting for the value of intangible assets.

We must remember that only the acquired/held intangible assets are always valued (only these are allowed to be included in the balance sheet). In terms of intangible assets' undervaluation, it should be noted that IFRS 3: Business combinations incentivises the accounting industry to apply low values to these property items. This is caused by the required impairment tests, which means that the asset's "writedown" will affect the profit and loss account of the entity that owns those assets. Therefore, the low values are offered in order to avoid the risks of impairment charges. If by absurdity, the value of the assets will increase, that increase will not be recognized. The big investors are keen on undervalued intangible assets because they offer a safety margin. For example, when we buy a 10 lei note for 8 lei, the rationale works, but not for long.

As a consequence, the companies are burdened with an excessively high cost of capital and it causes the intangible assets to be underinvested, thereby squandering the opportunity for earnings and growth that investors seek. In other words, for private investors, it is not easy to play the game of undervalued assets, as the reliable information on asset values is hardly acquired.

The undervalued intangible assets are mostly characterized by the human capital and skills development, especially by education and training (employee training), development of new organizational processes or brand accessory.

A first step to avoid this situation would be to include the above-mentioned intangible items in company reporting. This would imply that firm investments in human capital as they tend to be cut or stopped and reported separately, even if they are still accounted for as expenses. In most situations, managers are eager to assert that intangible assets are crucial in determining the success of owned or controlled companies.

In this context, the problem of understatement might start with investors who cannot correctly assess the value of intangible assets. For example, they are very slow in recognizing the full value of investment in research and development. Other effects of these intangible elements' understatement may be: decrease of a firm's ability to raise additional capital, increased risk of hostile takeover, misallocation of resources, reduced profitability of the enterprise or decreased financing.

A beneficial effect generated by the understatement of intangible assets aims at promoting the short-term economic gains and undermining the savings in the services sector. The causes of the beneficial effect are, as follows: the non-trading of intangible assets in active and transparent markets, prices that are considered information aggregators, lack of markets generating visible prices for intellectual capital, brands or human capital in order to help investors achieve a fair valuation of intangible assets related to intensive companies. When investors underestimate the value of intangible assets, the cost of the company's capital is too high, preventing growth and investment.

The intangible assets are the modern drivers of business growth and competitiveness. However, uncertainty regarding the financial position of intangible assets within businesses could lead to significant losses for investors. The traditional accounting uses conservative approaches to asset valuation, and systematically undervaluing intangible assets creates an excessive cost of capital (Baruch, 2003).

In most of companies, the financial information does not provide a correct view of the intangible assets' impact on their balance sheet, earnings and cash flow. For many firms, the decision-making information is still largely determined by the system of external financial accounting, which does not require disclosure of all intangible assets (Doppegieter & Zoller, 2003).

The impossibility of recognizing the real value of a company's intangible assets, which have the potential to generate large profits, causes an increase in the investors' perception of risk. This diminished investors' confidence in their attempt to get a higher rate of return. Therefore, there is proven that for these companies it is much more difficult to finance research and development or to make other future

investments in the idea of creating tomorrow's intangible assets. The undervaluation and the incorrect exposure of intangible assets may cause the overlooking of profitable future projects.

From the social point of view, several macroeconomic studies in the United States have shown that investment in research and development has reached about half of the optimal level. Baruch L. reviewed the financial reports of some firms and found that most companies did not disclose research and development expenses.

In the last three annual reports, the Enron company (an American energy, raw materials and services company) did not account for its research and development expenses. The natural question would be: why are there investments in intangible assets incorrectly measured by management? The nature of intangible assets makes them difficult to be estimated, as determined by conservative accounting methods favored by management. On the other hand, sometimes the management can manipulate certain ratios (return on assets and return on capital) in order to quench the thirst of existing investors.

The American company Enron has been described as an innovative model of a new enterprise economy. The broadness of this aspect and the other organizational failures have raised questions about the validity of intellectual capital, as a significant element within any organization, which can be very easily manipulated (Chatzkel, 2003).

An equally sensitive effect of the intangible assets' undervaluation is represented by the risk of hostile takeover. This can only increase if external shareholders lose confidence in management and decide to sell. If these shareholders do not recognise the true value of the company's intangible assets, then the future investments will be affected and the company would become a takeover target. The intangible assets are considered as the fundamental sources of the competitive advantage going to be identified, measured and controlled, resulting in the effective management of companies.

It is also known that there is a close relationship between most intangible investments and future earnings, as well as the capitalization process in business companies. Until the companies are ready to agree on the real value of all intangible assets, they will still be liable for merger or division. The risks are inevitable in the overvaluation or undervaluation process of intangible assets. In this respect, it is very important that the way of identification and measurement is well understood. As it is already known, their measurement methods can be single or multiple, choosing between cost-based valuation, market valuation or income-based valuation.

6. Application Specifics

6.1. Aspects Regarding the Misrepresentation of Financial Statements through the Intangible Assets Overassessment

An entity is required to disclose the nature and amount of a change in an accounting forecast which in the current or future period is expected to have an effect, excepting the subsequent periods, when that effect is impossible to be estimated (IFRS, 2015). As a result of errors, the annual financial statements may be drawn incorrectly up. An error is a misstatement arising in the recognition, evaluation, presentation or description of the financial statements' elements or when the financial statements are not in accordance with the International Financial Reporting Standards as they may include material or immaterial errors, that were made intentionally to get a certain presentation of the financial position and performance or cash flows of an economic entity.

The potential errors of the current period discovered in time are corrected before the publication of the financial statements is approved. It sometimes happens that significant errors are not discovered until later. The errors of the previous period are corrected within the existing comparative information about the financial statements for the future period.

An entity must retrospectively correct material errors of the previous period in the first set of financial statements approved of going to be published after their identification by:

restating comparative values for the previous period(s), presented where the error occurred;

restating the opening balances of intangible assets, liabilities and equity, if the error occurred after the first previously presented period (International Standards on Auditing: 240, 320 and 540)¹.

The misrepresentations in the financial statements, i.e. of intangible assets, may be discovered during the audit engagements. The auditor's reviews compliance with procedures relating to the correction of accounting errors, understanding and assessing the significance of audit errors, the nature, cause and design of audit errors, as well as the nature, cause and design of audit sampling errors.

threshold of materiali financial statements".

.

¹ CAFR, (2019), Ghid privind implementarea Standardelor internaționale de Audit, Standardele 240 "Responabilitatea auditorului de a lua în considerare frauda într-un audit al situațiilor financiare"; 320 "Pragul de semnificație în audit" și 540 "Auditorul estimărilor contabile conținute în situațiile financiare/ Guidance on the Implementation of International Standards on Auditing, Standards 240 "The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements"; 320 "The threshold of materiality in the audit" and 540 "The auditor of accounting estimates contained in the

The errors' correction found in the accounting of intangible assets is carried out through the reported result. The errors from previous financial-accounting periods are omissions and misstatements, included in the half-yearly and/or annual financial statements of the entity, for the previous period or periods, resulted from the misuse or omission of information:

- available when the financial statements for those periods were approved for issue;
- that could have been reasonably acquired and taken into account in the preparation and presentation of those financial statements (OMFP No 1802/2014).

These errors include the consequences of incorrectly recorded mathematical calculations, errors in the application of accounting policies, ignoring or distorting events.

According to the Romanian Accounting Regulations, in case of correction of errors involving the accounting loss carried forward, it must be covered before another profit distribution is made. Further information on the errors identified is set out in the notes to the financial statements.

For example, if we want to identify the value of intangible assets' transfer prices, the most significant aspects we need to take into account are the acquisition of legal and economic property. If the intangible asset holds a market value, it must be determined by reference to the price that an independent company could pay. Such an assessment may be drawn up by an authorized assessor specialized in the assessment of enterprises.

Therefore, we encounter two premises in the evaluation of intangible assets (which may or may not be recorded in the balance sheet of the company that owns them):

Regarding the direct exploitation of its own business, the intangible assets are considered a component of the invested capital and alongside with the other assets they determine the income of the company.

The indirect exploitation refers to the transfer of one or all attributes of ownership to another person. The transfer can be made by assigning all rights related to an intangible asset, license agreements or franchise agreements.

6.2. Practical Cases Regarding the Assessment of Intangible Assets for Recognition in Financial Statements

Practical case 1. Internally invention licence

The BETA entity has started on January 3, 2019 a research and development project for a new product licence, evaluated in the previous application,

The completion date of the research and development project was on 30.12.2020.

The expenses related for research and development project were carried out as follows:

- 30 000€ representing general research expenditure, between 03.01.2019 and 30.06.2019;
- 50 000€, representing research expenditure related to the above mentioned project between 1.07.2019 and 30.12.2019;
- €400 000 representing development expenses, between 01.01.2020 and 31.12.2020, of which 250 000€, after 30.06.2020, when the fulfillment of the simultaneous recognition criteria was demonstrated;
- €3000 representing the patenting expanses.

The licence application started on 03.01.2015 and its lifetime is estimated at about 5 years.

The cash-flow allocated to this inventory licence was foreseen at: 150 000 \in in 2021; 200 000 \in in 2022; 220 000 \in in 2023; 180 000 \in in 2024; 160 000 \in in 2025.

The update rate was estimated at 16%

There must be established:

- 1. The expenses of inventory patent, that will be recorded in the balance sheet, on 01.01.2021;
- 2. The accurate licence value is determined by updating its cash flow at the end of 2021, assuming that the patent will not suffer a loss of value from impairment.

Resolution

- 1. The inventory licensing expenses contain:
- a) the development expenses, starting from the date when BETA company can demonstrate the fulfillment of the 6 simultaneous criteria, provided in IAS 38.57, for the recognition of an intangible asset, respectively:
 - technical feasibility for completing the research-development project to use the licence in the production process;
 - the intention of project completion for using its outcome (i.e. the licence);
 - the way of making the inventory licence to bring future economic benefits (cash-flow), thus proving the existence of a market for its products;
 - the existence of technical, financial and other resources, necessary for the inventory licence application;

- the company's ability for trustworthy assessment of the invention licence expanses.

b) The patenting expenses.

The patenting cost (thousands of euros) = $250 + 3 = 253 \ 000 \in$.

2. The accurate value of the licence determined by discounting its cash-flow: The accurate value of the licence is about 594.5000 € existing in Table 1.

Tabele 1. The li	icence estimated	accurate value	(thousands €	(
------------------	------------------	----------------	--------------	---

Years	Cash-flow (thousands ϵ)	Discount factors	Current Cash flow (thousands €)
2017	150	0,862	129,3
2018	200	0,743	148,6
2019	220	0,641	141,0
2020	180	0,552	99,4
2021	160	0,476	76,2
Total			594,5
Own source			

Note: For every year: [1/(1+0,16)]=0.862; $[1/(1+0,16) \ 2]=0.743$; $[1/(1+0,16) \ 3]=0.641$; $[1/(1+0,16) \ 4]=0.552$; $[1/(1+0,16) \ 5]=0.476$.

At the end of 2021 there will be calculated the carrying amount of the licence as follows:

- annual redemption: 253:5 years = 50,6000€ per year;
- the book value: $253 50.6 = 202.4000 \in$.

Practical case 2. Separately acquired licence

The BETA society has bought for 150,000€ an invention licence for a new process from a patent

The licence seller has applied an 8% discount on the selling price.

The customs duty for importing the patent was 15 $000 \in$.

The expenses incurred for the analysis of this licene were 6 000€.

It requires the licence cost that will be accounted for on initial entry in the balance sheet.

Resolution:

The licence cost = 150.000 - (8%*150.000) + 15.000 + 6.000 = 159.000

This practical case is appropriate for determining the cost of an intangible asset, acquired by purchase, that will be initially recorded in the balance sheet.

Practical case 3. The impairment test of the invention licence

A licence is included in a cash-generating unit (CGU) and must be tested for impairment in accordance with the requirements of IAS 36: Impairment of Assets for establishing the licence recoverable amount. The assets comprising the NGU are set out in Table 2:

Table 2. The CGU Assets Exposure

CGU assets	Book values on 31.12.2020 (€)	
Invention licence	200.000	
Tangible assets	1.360.000	
Commercial fund	120.000	
Total	1.680.000	
Own source		

Other information required:

- The estimated useful life of NGU is 8 years;
- The residual value of NGU, at the end of 8th year, is zero;
- The cash flow estimation before taxation was carried out in two stages:
- The best forecast of pre-tax cash flow for the 4 years (2021-2024) from the management of the entity owning the CGU;
- Spreading the pre-tax cash flow from the previous year, using the decay rates, for the last 4 years (2024-2021);
- the after-tax discount rate, taken from the market for similar assets, is 12.6%;
- the profit tax rate was 16%.

Resolution:

• The discount rate appropriate to the pre-tax cash flow discount (kîi) was calculated according to the equation $k\hat{n} = k$ after tax/(100-the corporate tax rate) $\rightarrow k\hat{n} = 12.6/(100$ -16) = 0.15 (15%).

The identification of CGU's used value is shown in Table 3.

Table 3. The identification of CGU's used value

Time	Decrease ratio	Pretax Cash flow (ϵ)	Discount factor (15%)*	Updated cash flow (thousands €)
2021		320.000	0,869	278.000
2022		360.000	0,756	272.000
2023		380.000	0,657	250.000
2024		400.000	0,572	229.000
2025	-10%	360.000	0,497	179.000
2026	-12%	317.000	0,432	137.000
2027	-15%	269.000	0,376	101.000
2028	-20%	215.000	0,326	70.000
	•		Used Value	1.516.000

Own source

*Note: For each individual year: [1/(1+0,15)]=0,869; $[1/(1+0,15) \ 2]=0,756$; $[1/(1+0,15) \ 3]=0,657$; $[1/(1+0,15) \ 4]=0,572$; $[1/(1+0,15) \ 5]=0,497$; $[1/(1+0,15) \ 6]=0,432$; $[1/(1+0,15) \ 7]=0,376$; $[1/(1+0,15) \ 8]=0,327$

The use value of NGU is \in 1,516,000; the recoverable value \in 1,516,000 and the carrying value of NGU is \in 1,680,000.

The loss of NGU's value is highlighted by the equation: Loss of value of UGN = 1,680.000 - 1,516,000 = €164,000.

Allocation of the impairment loss on the NGU's three assets:

- 120.000 € intended for the commercial fund;
- 38.360 € tangible fixed assets (87,18%*44.000 €);
- 5.640 € related to the licence (12,82%*44.000 €).

After the impairment loss, the book value of the patent remained at \in 194,360 (200,000-5,640).

In conclusion, taking into account the finality of the obtained calculations, there must be stated that the most advantageous situation for the invention licence evaluation from those three basic necessary ones (internally generated, separately acquired and depreciated licences), being recognized in the financial statements, is represented by the internally generated invention licence.

6.3. The Influence of Intangible Assets on the Economic-Financial Indicators of the Economic Entity

The new economy requires new measurement methods for both tangible and intangible assets, sustaining the fact that the existence of well-thought-out indicators,

based on a coherent theoretical framework, are like the words and syntax of a language.

The measurement of intangible assets is very beneficial in reflecting the value and financial performance of an economic entity. The ease of creating indicators for this process support is quite obvious, but the problem arises when it comes to choosing the most favourable way of calculation and interpretation. These indicators are very useful for managers who highly value innovation and creativity, helping them to understand what relationships between people (employees, management, partners, shareholders, customers, suppliers, etc.) look like and how useful they would be to the company's bottom line.

Cap Gemini Ernst & Young – the Center for Business and Innovation (CBI), conducted a series of studies to highlight the role of intangible assets in value creation within a modern society and developed a rigorous model, called The Value Creation Index (VCI) or the value of invested capital.

Through such an index, it is possible to identify the way of bringing value for progressive companies, allowing the users to measure the impact of intangible assets' key categories on a company's market value. It is a very relevant indicator in quantifying, justifying performance and valuing intangible assets.

From the practical work there can be identified the following value ranges:

- If VCI> $0.40 \rightarrow$ ideal situation: the company is outstanding, high performing;
- If $0.25 \le VCI \le 0.40 \rightarrow$ the company is profitable;
- If $0 \le VCI \le 0.25 \rightarrow$ the company is relatively successful;
- If VCI $0 \rightarrow$ the company is underperforming, unprofitable.

Over time, the value creation index will evolve, continuing to identify the drivers of value creation, while remaining flexible enough to adapt to the ever-changing nature of the companies in the economy to which they are connected (Low, 2000).

According to the specialized literature, there are eight categories of non-financial indicators for determining value creation, as follows (Anghel, 2008): the innovation; the quality; customer relations; managerial ability; alliances; the technology; brand value as well as the environmental and community aspects.

The E-commerce companies are those for which more than 90% of the value is caused by the existence of such indicators. 10% of the invested capital value represents approximately 5% of the capital market value.

The studies also identify the role played by these indicators as the fact that 50% of a company's traditional value is underpinned by such indicators. In the U.S. airline

industry, in terms of how the value of invested capital works, the non-financial indicators mentioned above can be ranked as follows:

- Among the top places we can find the people quality and talent (in the employees' category) as well as the capacity for innovation
- The managerial ability demonstrated by quality and existing relationships are key elements for the companies' value in this industry.
- After the employees' category, the service quality represents another equally important factor.
- The technology and its environmental aspects (e.g. the use of fuels or additives with the lowest possible level of pollution) are key factors as well.
- A weak point could be the ticketing system, boarding or baggage handling. The value of capital invested (VCI) applied to increase control and efficiency in this area will not increase the market value.

"The value creation can be calculated by making the difference between the return on capital employed¹ "(it measures the return determined by the company's long-term funds) and the weighted average cost of capital (cmpc)², relative to the weighted average cost of capital. According to theories, the capital of those employed is the sum of long-term liabilities and equity.

Therefore, by developing a set of standardisation measures, weighted according to their relative impact, the managers have the tools to lead better and provide the ability to monitor their company's future performance. At the same time, if disclosure rules change, investors will be armed with a more uniform, less subjective and more robust method of valuing companies.

All the models and indicators adopted for measuring intangible assets have a common weakness as all these "operations" provide a picture of the certain indicators' evolution, but do not create a relationship between the value of the company, i.e. the main management objective, and the evolution of the intangible asset indicators. Indicators capable of identifying performance are constantly being developed so that they can refine previously existing models. Another variant of the indicators for measuring such assets is shown in Table 4.

¹ Return on capital employed (ROCE) is calculated according to equations (33) and (34):(33) Operating profit (EBIT)/*(Long-term debt + Equity) (www.tradeville.eu) (34) EBIT = Earning before interest and taxes

² It is specific to a particular investment project (www.eval.ro). It represents the discount rate determined as a market-weighted average of the costs of all sources of finance in a company's capital structure.

the weighted average cost of capital, Wacc (%)= Σ (p *C) where: ps = the share of each source of capital in total capital; CS = the cost, in percentage terms, of each source of capital.

Table 4. Intangible Assets Measurement Indicators

External structure	Indicators of		
indicators	Internal structure		competence
Growth indicators	- Development of the external structure	- IT investments - Investments in the internal structure	Index of competence - Number of years in profession - Education level - Skills rotation
Renewal/renewal indicators	- Improved company image from customer relations (revenue share) - Sales to new customers	- Improved organisational structure from customer relations (revenue share) - Proposal of new products/services - New implemented production processes	 Skills gained from customer relationships (revenue share) Training and education costs Diversity of skills
Usage efficiency indicators	- Profit per customer - Sales per customer - Win/loss ratio per customer	- Share of administrative staff	Share of professionalsAdded value per employeeProfit per employeeProfit per expert
Risk / constancy indicators	- Customer Satisfaction Index - Share of large clients - Age structure of contracts held by the firm - Local customer rate - Frequency of renewed contracts	-Value/attitude index within the organisation - The organisation age - Administrative staff rotation - Number of employees with less than 2 years' seniority (Rookie Rate) - Seniority as an employee of the company	 Professionals' rotation Average salary per employee Seriousness

Source: (Firescu, 2009, p. 117)

All the previously exposed indicators have the same purpose, namely, the increase/development of the skills level (generating their diversification), the development of innovation, creativity and the creation of new values among intangible assets.

7. Conclusions

In a market economy, the tangible investments (tangible fixed assets) and intangible investments (intangible fixed assets) play a particularly important role in an entity and require complex analysis for making the best management decisions. The relevant issues consist of the debate on the methodology of intangible assets' valuation for recognition in financial reporting through financial statements and the debate on the issue of financial statements distortion through over/undervaluation of intangible assets in the entity.

The intangible assets and the intellectual property objects have enormous potential, as through effective management and their exploitation by entities, they can offer them important benefits, which can generally be enjoyed by society as well.

Concluding the above mentioned, we note that the undervaluation of intangible assets would result in a higher cost of capital and an increased risk of forced acquisition. In the situation of intangible assets' overassessment, due to the fact that the true value of the entity is not well established, the investors of the entities won't receive the expected result, and this implies a lower cost of capital and an influx of risky ventures.

As there is a real confusion between trademark, brand and goodwill, there may occur relatively distorted interpretations of the companies' real value that own important brands. In this context, the risk of undervaluation is simultaneously generated, but there can be considered the risk of the respective assets' overvaluation, as well. The valuation of intangible assets undertaken by the income approach tends to overrank them, the cost approach tends to underrank them, while the market approach results in intermediate values for the assessed intangible assets.

Therefore, I consider that regardless of the applied valuation methods (by market, income or by cost), they should be supported by a second valuation method (taking into account the circumstances, the facts, the characteristics of the intangible assets, the availability and the credibility of the financial-accounting information), which certifies the value resulting from the first applied method.

Even if the intangible assets can be neither touched nor seen, and their value can be hardly measured, they drive innovation and highly contribute to the good functioning of the entity, providing a competitive advantage to any country. Currently, the intangible assets hold almost 80% of the market value in modern companies, being able to produce future net profits, and from a legal point of view they are permanently protected.

References

Anghel, I. (2008). Analysis and valuation of intellectual capital and intangible assets. Theoretical and Applied Economics, no. 3.

Baruch, L. (2003). Remarks on the measurement, valuation, and reporting of intangibles. FRBNY Economic Policy Review.

Brady, R., Beach, R., & Skmorucha, K. (2003). Determining and preserving the assets of dotcoms. *Delaware journal of corporate law*.

Cassidy, J. (2002). Dot. Con: The Greatest Story Ever Sold. New York and London: Allen Lane.

CECCAR. (2015). IFRS International Financial Reporting Standards. Bucharest: CECCAR Publishing House.

Chatzkel, J. (2003). The collapse of Enron and the role of intellectual capital. *Journal of Intellectual Capital MCB UP Ltd.*

Doppegieter, J., & Zoller, M. (2003). Managing Intangible Assets to Leverage Shareholder Value . Working Paper.

Dumitrana, M., & Chirața, C. (2011). *Basics of accounting. Fifth Edition*. Bucharest: University Publishing House.

García-Ayuso, M. (2003). Factors explaining the inefficient valuation of intangibles. *Accounting, Auditing & Accountability Journal MCB UP Ltd.*

Gerzema, J. (2008). The Brand Bubble. The Looming Crisis in Brand Value and How to Avoid It. New York: Jessey-Bass.

Gheorghiu, A. (2010). *Analysis-diagnostic and enterprise evaluation*. Bucharest: Victor Publishing House.

Low, J. (2000). The Value Creation Index – Abstract. Journal of Intellectual Capital, No. 3.

Ristea, M., Dumitru, C., Ioanas, C. & Irimescu, A. (2009). *Accounting of commercial companies – Volume 1*. Bucharest: University Publishing House.