

# MANAGEMENT OF INTANGIBLE ASSETS

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## **ABSTRACT**

*In a society marked by economic crisis, creating value and market competition becomes a heady company need. According to recent studies, in competitive companies, the highest share in the assets is hold by the value of intangible assets. Consequently, this involves the identification, measurement, management and efficient development of these inputs (knowledge, information, intellectual property, skilled labor, etc.). It is noted that, in the case of companies that have established management responsibility on intangible assets (intellectual capital), they recorded a value creation, superior financial performance and long- term development. In time intangible assets have become the most important sources of competitive advantage. This work aims to identify these resources in a company, presenting the most appropriate methods for economic evaluation and estimation of surplus value generated by efficient management.*

**KEYWORDS:** *intangible asset management, value creation, competitive advantage, economic valuation of intangible assets, intellectual capital*

## **Motivation of the intangible asset management**

When it was found a significant difference between the market value of a company and its book value, the natural question was: What is the source of this value surplus?

Since 1961, the Federation of European Accountants (FEA) has stated that "an enterprise value identifies with the value of the elements that are used for a specific economic purpose." Given this reasoning, the answer to the question is: the company also has intangible assets unrecorded in the accounts, which contributes to this value (GW).

By the 80s, the vision of value creation assigns the external environment of an organization a major importance in understanding the competitive advantage and value surplus creation [1]. The value created externally was attributed to the influence of social, psychological, and political factors (whose individual influence is difficult to quantify). Since 90s, with the phenomenon of globalization a new perspective on competitive advantage has been shaped up, so domestic resources are considered responsible for this advantage. In fact, this new insight (resource-based view) questions the external perspective described above and suggests that the competitive advantage is primarily due to differences between specific internal

resources of each organization. [2] Today, when "the cost of assets is falling worldwide" the difference between companies is made mostly by the company's intangible assets. In addition, the success of a company is given by the way it manages to combine in a unique, coherent and creative manner all these elements that generate value added.

According to recent studies (February 2009), conducted by Ernst & Young in 709 companies from 21 countries, regarding the evaluation of intangible assets at fair value, brands represented on average only 23% of the company assets, while 47% of the enterprise value was attributed to "goodwill." And according to the report "Singapore performance on intangible assets" conducted by Brand Finance (leader in brands and intangible assets evaluation) it was indicated that: are global leaders in the United States and Switzerland, where the intangible assets contribute about 75 percent of market value. Considering the fact that identifiable intangible assets may be assessed individually by the three methods known: cost-based method, income-based method and direct comparison method which do not involve a difficult professional judgment, we will focus on intangible assets unrecorded in accounts.

### Identification of intangible assets not recorded in accounts

In the case of listed companies, the difference between market capitalization (market value of a company) and the book value of equity is the value added attributed to the company by the market or the market value added margin (MVA).

$$MVA = \text{market value of equity (MV)} - \text{book value of equity (NAV)} \quad (1)$$

**Table 1**

Indicators	BIO		SNP		OLT		BRD	
	2009	30 June	2009	30 June	2009	30 June	2009	30 June
Share rate (lei/share)	0,2	0,17	0,25	0,3	0,23	0,21	13	10,7
Book Value (lei/share)	0,12	0,13	0,24	0,28	-1,34	-1,85	10,19	10,95
MVA (lei/share)	0,08	0,17	0,01	0,02	1,57	2,06	2,81	-0,25
Price/ Book Value	1,66	1,30	1,04	1,071	-0,17	-0,11	1,27	0,977

Source: www.kdt.ro

We consider that the MVA model could better represent the economic reality if instead the net asset value (based on book values) we use the corrected net assets value (CNAV). In this case the model becomes:

$$MVA = QR - CNAV \quad (2)$$

In the case of large companies with lots of assets, setting CNAV requires a huge amount of work (individual assessment of each element and their inspection) as such if it has been recently carried out a re-evaluation (these book values are closer to market values) we may give up on CNAV in favor of NAV, without committing a major error. In the cases presented, can we speak of a value created in the enterprise, specifically the existence of an intangible asset? If at this moment, one of the companies presented were purchased, the price paid per share would be the quoted one. In accounting, the difference between the price paid and market value of net assets value, would be recorded at goodwill ( $GW_{OLT} = 538$  million lei in 2009).

**Table 2**

Indicators	BIO		SNP		OLT	
	2009	30 June	2009	30 June	2009	30 June
Equity (million lei)	136,0	145,6	14.056,1	16.105,9	-460,1	-637,2
Market value (million lei)	219,0	186,1	14.161,0	16.993,2	78,9	72,0
GW recorded (million lei)	82,92	40,44	104,8	887,2	538,9	709,3

Source: www.bvb.ro

Namely:

$$\begin{aligned}
 GW_{\text{recorded in accounting}} &= AC - CNAV \Rightarrow \\
 &\Rightarrow GW = AC + TD - [IIA + TA + FA + (CA + ERA)] \quad (3)
 \end{aligned}$$

Where: AC-acquisition cost, corrected net asset value CNAV, TD - total debt valued at market value; IIA-market value of identifiable intangible asset, TA-market value of tangible assets, FA- market value of financial assets, CA – current assets, ERA - Expenditure recorded in advance.

In the case of efficient markets, only the financial performance or other domestic non-financial factors (customers, qualified staff, etc. which indirectly will generate superior financial performance) are those that cause a higher price relative to book value. As we have shown they are short term situations in which the quotation may increase even if the internal financial performance decreases. For instance, in the case of OLT company it recorded a loss (-209 million in 2009 and -177 million lei in June 30 2010), a negative internal economic value added, however, the market provides value surplus in relation to book value (1.56 lei per share in 2009).

The indicator that signals the presence of goodwill, created internally (intangible asset), but which can not be reliably quantify is the economic value added (EVA). For the amount invested the potential investors, shareholders and creditors demand a return at the level of gain opportunities from the financial market. If the return on assets in operation (RE) is higher than the weighted

average cost of the market funding sources (WACC), within the company value is created (EVA > 0). Otherwise there is a loss of value (EVA < 0). This value surplus created internally within an acceptable offer at a higher price relative to book value.

$$EVA = CI \times ( \underbrace{ROIC}_{\text{Return of the company}} - \underbrace{WACC}_{\text{Market return}} ) = (CI * ROIC) - (CI * WACC) \quad (4)$$

In which CI – capital invested; ROIC – The rate of return on invested capital is calculated  $ROIC = \frac{\text{Profit before taxation (EBIT - IP)}}{\text{Economic Assets (AI + NCC)}}$ ; WACC – the weighted

average cost of the invested capital. In case of listed companies to determine which investment is more effective in relation to another, Sharpe indicator is also calculated that practically expresses the yield of a share per risk unit.

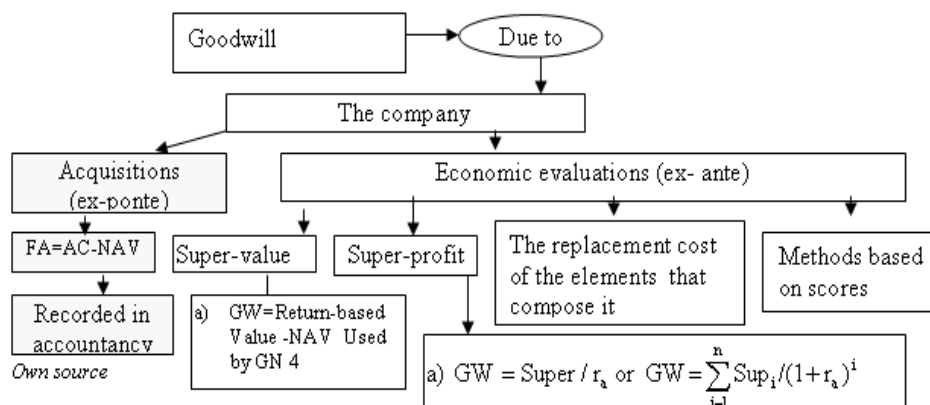
**Table 3**

Indicators	ATB		SNP	
	30. 12.2009	Forecast 2010	30. 12.2009	Forecast 2010
Capital Invested (million lei)	262,4	286,5	24.094	22.271
ROIC [%]	7,3	9,2	9	7,3
WACC [%]	8	7,5	9,2	7
EVA (million lei)	-183,68	487,05	-4818,8	6681,3
ROE [%]	4,92	8,09	9,73	10

It may be noted that in 2009 it was not created any internal value, the positive difference between the stock quotation and the book value is the result solely of the external environment, instead based on the forecasts presented in the two company's Budget of revenues and expenditure for 2010 it is considered that an internal value creation was recorded.

### **Evaluation of assets recorded in the accounting**

As Eddvinson Malone specifies, if the company is treated as a living organism, for example a tree, accountancy sees only the fruits, while the roots and trunk are those who feed and lead to the existence of fruits.[2] Quantification of goodwill (ex ante) may be made by several methods.



**Figure 1 Methods of goodwill calculation**

Based on market value (MV) estimated by updating (capitalization) the anticipated gains to be made in the future (earnings which takes the form of net cash flows, profits, dividends, EVA) minus the enterprise value by the net asset value we can appreciate the value of intangible assets (result as residues) that generate this value surplus.

$$GW = MV - CNAV.$$

$$GW = MV - CNAV = GW \Rightarrow MV + TD - [IIA + IC + FA + (AC + ERA)] \quad (5)$$

where: MV-assessed market value of the company based on updated or capitalization of net cash flow, dividends, profits, economic value added.

Taking into account the dividends distributed in 2009, forecasts of 2010 regarding the dividends and the possible rates of shares we could determine whether the companies had created and managed efficiently the intangible assets recorded in the accounts.

**Table 4**

	2009	2010	Anticipated rate	Total	NA	MV	NAV	GW
PTR	Lei/share	Lei/share	Lei/share		Mil. pieces	Mil. lei	Mil. lei	Mil lei
Dividends	0,015	0,2	0,32					
Updating Factor	0,92	0,87	0,82					
Prezent value	0,013	0,17	0,26	0,45	56.644.	25.469,4	14.056,1	11.413,2
OLT								
Dividends	0	0	0,25					
Updating Factor	0,92	0,87	0,82					
Prezent value	0	0	0,21	0,21	343	74,90	-460,10	535,00

If we take PTR company, according to the results expected, it is noted the existence and management of these intangible assets not shown in the accounts (11,413 million lei), whereas in the case of OLT company this goodwill is due solely to the growth of share rate (external factors). In reality, investors evaluate (ex ante) the possibility of additional profit compared to the potential profit to be made in other investments on the financial market (super-profits = net profit). This super-profits evaluated, has as main causes: either an excess of the selling price (Price Premium), a lower cost (variable or fixed), or a combination of both. This explains the higher price paid per share, stock or business (BRD, SNP, ANT) in relation to the replacement value on the assets held market ( $GW = AC - CNAV$ ).

The life and death of corporate is now based on innovation, which means a huge increase in intangibles.

### **Conclusions and proposals**

In Romania, building competitiveness, or rather obtaining competitive advantages has not been a priority for companies. The period (2000-2008) when the population's revenues were growing and on the market demand was high, Romanian companies have taken advantage of this context increasing their profitability and value. Many of them, or rather most of them, have not done it in a sustainable way, step by step but on an accelerated basis, by skipping some steps [4] This intangible asset - GW, unrecorded in accounts (because it can not be assessed individually) and highlighted (ex post) in practice at the time of sale, division, merger, etc. of the company it has both domestic sources (financial and non-financial performance) and external ones. The domestic source is indicated by EVA indicator that tells us not only a financial but also a superior performance compared to the one existing on the market. In assessing and measuring Knowledge Management besides the financial methods (which provide a more reliable measurement) there are methods based on scores which ensure a more balanced approach, taking into account non-financial aspects (more difficult to quantify). The usage of methods based on enterprise market value by updating it has a subjective character, especially for a minority investor who can not influence funding, investment, management, an distribution of dividends policy, etc. and the projections presented by the companies to the National Securities Commission are for one year only.

Consequently, following the example of competitive firms each company has the duty to identify, measure, manage and develop efficiently these inputs (knowledge, information, intellectual property, skilled labor, etc.) and where possible to implement an intangible assets management. Moreover, at the end of this crisis those companies that are able to manage this capital will have a stronger market position.

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