## GRAPHIC EVALUATION OF COPYRIGHT AND OF RELATIONS BY THE METHOD OF DISCOUNTED CASH-FLOW (DCF)

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#### Abstract

According to the new technologies and due to the phenomenon of sustainability, in the knowledge economy, intangible assets are renamed, being limited by resources existential any economic entity, the terminology "intangible", "invisible", "intellectual" or "us/immaterial" which emphasizes knowledge by which human capital is undre different forms.

Due to the existence of a variety of approaches, accounting literature, together with the economic but also the specific evaluation activity reflects complexity permanent classification of intangible assets.

As we all know, the moment items related intangible assets can be identified, presented and defined in terms of a wide range and complex standards such as the International Accounting Standards, Financial Reporting Standards and not least the International Valuation Standards.

To support the theme of the current research we have chosen as the case study approach to assess a sampling of copyright and relationships using the discounted cash flow method (DCF).

**Keywords:** intangible assets, evaluation, copyright, relations, The Method of Discounted Cash-Flow (DCF).

JEL Classification: M40, D04, C89.

#### 1. Introduction

Through International Accounting Standard IAS 38 Intangible Assets, the intangibles are classified as expenses, development expenses, licenses, patents, trademarks acquired other similar values, copyright and other intellectual property rights, concessions received fund commercial positive (goodwill) and negative (badwill) acquired and other intangible assets (IASB, 2013).

Copyrights belong to intellectual property rights and include works written, spoken and recorded video works, paintings, sculptures, speeches, performances, lectures etc. .

According to Organisation for Economic Co-operation and Development (OECD), the criterion for identifying, classifying accounting intangible assets is evidenced by identifiable intangible assets (which can be identified separately) such as franchise, trademark, copyright or copyright, patent and so on.

Also on copyright and relationships (thematic research), according to International Financial Reporting Standards, IFRS 3 Business Combinations, the identifiable intangible assets, arising as a result of a business combination, are individualized as (Stan, 2010), (IASB, 2013):

- a) Customer-related intangible assets represented by: their customer portfolio unfulfilled orders or production, customer contracting and related relationships and contractual relationship with customers.
- b) Intangible assets contractual evidenced by: licenses, copyrights and novation agreements; advertising contracts, construction, management, service or supply; leases/rental/leasing; building permits; franchise; operating and broadcasting rights; usage rights (mining rights, water rights overflight, logging roads and authorization); service contracts (mortgage services) and employment contracts that are beneficial for the employer in the event of a contractual salary below the market wage.

Also in the category of intangible assets arising from contractual and legal portfolio also includes undelivered orders or production, contracting with customers and relations involved.

Customer portfolio and contractual customer relationship intangible assets formed from an individual category of rights, which retain the character of severability, being in the definition of intangible assets.

By adopting general standards of practice in evaluation - GN 4 International Valuation Standards Board, grouped intangible assets following form (Banacu, 2005): assets derived rights; assets based on relationships; grouped intangibles; intellectual property.

Relationships based assets are assets that have a value to the parties, which are based on relationships.

As examples we can reffer to: customer relations, relationships with funizorii relationships with distributors, skilled workforce (Burghelea, 2011) or structured relations between the parties.

### 2. Intangible assets on Romanian territory

The evaluation of intangible assets involves quantifying and specifying the value (in monetary units), identification, movement and modification heritage idea reflection in accounting, ie the optimal solution to identify the best value of an intangible asset, applying minimum two assessment methods.

The entire evaluation process of such asset components is conducted by respecting certain categories of standards, rules or regulations of such specialty:

- 1. International Accounting Standards (IAS), such as standard IAS 38 Intangible Assets; IAS 36 Impairment of Assets; IAS 10 Events after the balance sheet and standard IAS 8 Accounting policies, changes in accounting estimates and errors.
- 2. International Financial Reporting Standards (IFRS), namely: IFRS 3: Business Combinations; IFRS 5: Assets held for sale and discontinued operations and IFRS 6: Exploration for and evaluation of mineral resources.
- 3. International Valuation Standards (IVS) among them: Standard IVS 1: Market value value type, currently IVS 101 Terms of reference of the review (ANEVAR, 2015); Standard IVS 102: Implementation (ANEVAR, 2015); Standard IVS 103: Report (ANEVAR, 2015); Standard IVS 210 Intangible assets (ANEVAR, 2015) and standard GN 4: Valuation of intangible assets (International Standard Valuation).
- 4. Order no. 1.802/2014 approving the Accounting regulations on the annual individual and consolidated financial statements.

All standards, rules or regulations specialized above reflects the way of defining, identifying, recording (initial, ongoing or current and future) of intangible assets, with applicability and evaluation.

Based Order no. 1802/2014 assessment of intangible assets requires knowledge and to assimilate the particular aspects identified in the first instance the special features held by such assets (Finance Ministery, 2014).

Given the time it is performed, the assessment is presented in two forms, namely: current assessment and periodic evaluation. The current one is passed into and out of the estate, while periodic evaluation is carried out at closure of the financial year. The last one is performed simultaneously with the property inventory and annual financial statements.

## 3. Case study for the assessment of copyright and relationships through Discounted Cash Flow Method (DCF)

# 3.1. The evaluation process conducted by copyright Discounted Cash Flow Method (DCF)

We believe that S.C. Good Music S.R.L., the company the problem of a famous troops of rock music on the territory of our country, would negotiate on behalf of a contract of sale of the rights of the author of the songs and videos available on CD and DVD with which have made themselves known in this field, recorded and printed at the House of Discs Roton "Music" S.R.L., namely:

- X TV to TV stations (the number of television appearances to 65 euro per year occurrence);
  - Radio Y (the number of plays on post 1.3 euros per play);
- publication of the novel and the history of the band in an edition presented in Table no. 1;
  - CD + DVD package sale via labels.

As a requirement will have to identify the value of copyright will be generated by the portfolio editing band.

Table 1
Evolution of indicators necessary for evaluation of the copyright (on the 4vear study)

year study)								
Crit.	Indicator/An	Year 1	Year 2	Year 3	Year 4	TOTAL (euro)		
1	Number of TV appearances	1400	1000	800	600			
2	Price per appearance (euro)	65	65	65	65			
3	Revenue from royalties from TV $(r_1*r_2)$	91.000	65.000	52.000	39.000	247.000		
4	Number of radio appearances	700	700	700	700			
5	Price per appearance (euro) (2%*pret TV)	1,3	1,3	1,3	1,3			
6	Revenue from royalties from radio [20%*(r <sub>4</sub> *r <sub>5</sub> )]	182	182	182	182	728		
7	Number of copies	10.000	8.000	3.000	1.000			
8	Price per copy	9	7	5	4			
9	Revenue from royalties from Publisher	22.500	14.000	3.750	1.000	41.250		

Crit.	Indicator/An	Year 1	Year 2	Year 3	Year 4	TOTAL (euro)
	$[25\%*(r_7*r_8)]$					
10	Number of copies	18.000	8.000	4.000	2.000	
11	Price per copy CD/DVD	80	60	40	20	
12	Revenue from royalties from label 55% [25%*(r <sub>10</sub> *r <sub>11</sub> )]	360.000	120.000	40.000	10.000	530.000
13	Total income (TI) $(r_3+r_6+r_9+r_{12})$	473.682	199.182	95.932	50.182	818.978
14	General costs (33%*TI)	156.315	65.938	31.658	16.560	270.471
15	Gross (r <sub>13</sub> -r <sub>14</sub> )	317.367	133.244	64.274	33.622	548.507
16	Tax 16% (r <sub>15</sub> *16%)	50.779	21.319	10.284	5.380	87.762
17	The net result $(r_{15}$ - $r_{16})$	266.588	111.925	53.990	28.242	460.745
18	Discount factor 14% <sup>1</sup>	0,8772	0,7695	0,6750	0,5921	
19	Net result update $(r_{18}*r_{17})$	233.851	86.126	36.443	16.722	373.142

Source: Personal processing

By analyzing the indicators listed in Table no. 1, I reflected correctly assess the applicability of copyright through the discounted cash flow method (DCF), obtaining the value of **373.142 euro**.

As a concluding point, it should be noted that through the evaluation of intangible assets we can highlight the effectiveness of intellectual property rights of an enterprise (Balan, 2012), even having the opportunity to realize new objects of intellectual property that can be assessed using licenses.

# 3.2. The evaluation process conducted by relations Discounted Cash Flow Method (DCF), related to the Income approach (inspired from Gheorghiu, 2010)

Through Discounted Cash Flow Method, the evaluation of relations by the income approach, can be synthesized as to the second table of the present research, which materializes that business value is identified due to customers through an extensive evaluation process.

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 $<sup>^1</sup>$  For each year in part:  $[1/(1+0,14)] = 0,8772; \ [1/(1+0,14)^2] = 0,7695; \ [1/(1+0,14)^3] = 0,6750; \ [1/(1+0,14)^4] = 0,5921.$ 

Table 2
The evolution of relations necessary for evaluation indicators (on the 4-year study)

0.4	T 11 / / / / / / / / / / / / / / / / / /	37 4	Study)	T/ 2	**	TF ( 1
Crit.	Indicators/Year	Year 1	Year 2	Year 3	Year 4	Total
1	Number of	100	200	400	800	1.500
_	customers	100			000	1,000
2	Customer	1.500	1.400	1.300	1.200	
	contribution/year					
3	Total income (TI)	150.000	280.000	520.000	960.000	1.910.000
	$(r_1*r_2)$ (euro)					
4	Operating	75.000	112.000	156.000	192.000	535.000
	expenses					
	An1=50%* TI,					
	An2=40%*TI,					
	An3=30%*TI,					
	An4=20%*TI.					
5	General and	8.000	8.000	8.000	8.000	32.000
	administrative					
	expenses					
6	Depreciation and	580	560	540	520	2.200
	amortization of					
	intangible assets					
7	Total expenses	82.580	120.560	164.540	200.520	568.200
	$(r_4+r_5+r_6)$					
8	Result before tax	67.420	159.440	355.460	759.480	1.341.800
	$(r_3-r_7)$					
9	Tax 16%	10.787,2	25.510,4	56.873,6	121.516,8	
	$(r_8*16\%)$					
10	Bonuses	200	140	100	80	
11	Investment in	8.000	6.000	4.000	2.000	
	advertising and					
	maintaining the					
	relationship					
12	Net cash	48.432,8	127.789,6	294.486,4	635.883,2	
	$[r_8$ - $(r_9+r_{10}+r_{11})]$					
13	Discount factor	0,909	0,826	0,751	0,683	
	10%1					
14	Net cash updated	44.025,4	105.554,2	221.159,3	434.308,2	805.047
	$(r_{12}*r_{13})$					
15	Business value					805.047
	due to customers					
	(euro)					
	(Total r <sub>14</sub> )					

Source: Personal processing

 $<sup>^{1}\ \</sup>textit{For each year in part:}\ \ [1/(1+0,10)]=0,909;\ \ [1/(1+0,10)^{2}]=0,826;\ \ [1/(1+0,10)^{3}]=0,751;\ \ [1/(1+0,10)^{4}]=0,683.$ 

As a concluding point, I have to mention that the correct application of the income approach through Discounted Cash Flow Method (DCF), highlights obtaining a value of business due to customers **805047 euro**.

### **Conclusions**

Valuation of intangible assets effective settlement requires accurate assessment of their value using one or more methods of assessment. Fairness evaluation method is applied as a starting point to quantify the economic benefit associated with the pool of assets held by a particular entity.

In other words, choosing the right approaches or methods of assessment must take into account the following key elements: type used value, determined by reason of carrying out that evaluation; availability of essential inputs and assessment methods and approaches taken by the persons concerned or a clearly defined market.

The assessor will always review and reconcile data held or disseminated in order to obtain a favorable opinion on the final value.

This article reflects easily that intangible assets have a real impact on corporate performance, the managerial department, involving the holding viable models that allow accurate measurement and evaluation management investment efficiency of intangibles.

Through evaluation of intangible assets we have highlighted the effectiveness of intellectual property rights of an enterprise, from which resulted the possibility of developing new intellectual property objects that could be assessed using licenses.

Research carried out allows me to appreciate the proper application of the income approach through Discounted Cash Flow Method (DCF), can highlight obtain a specific value due to business customers.

Together with nature, labor and capital, intangible assets will continue to contribute to changing the entire economic system.

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