

## COMPANY VALUATION: OBJECTIVES ASPECTS IN THE VERIFICATION OF ECONOMIC VALUE OF INTANGIBLES ASSETS\*

**NIVALDO JOÃO DOS SANTOS**

*Doctor in Production Engineering from the Federal University of Santa Catarina (UFSC). Accountant, Partner-Director of Peritia Contadores Associados S/S. Address: Rua Araújo Figueiredo, 119, sala 1104 | Centro | 88010-520 | Florianópolis/SC | Brazil.*

**E-mail:** [nivaldo@peritiacontadores.com.br](mailto:nivaldo@peritiacontadores.com.br)

### ABSTRACT

This article discusses objective aspects in determining economic value to the intangible assets created by the company. Such assets, housed under the name of intellectual capital or goodwill, are represented by the brand, the good customer service and the prime location of business, among others. This is a case study of company and business valuation within the auto industry, located in southern Brazil, involving judicial determination. The methodological procedures involved the economic valuation of the company in two ways: a) as a set of equity assets and b) as a business generator of free cash flow over the years. It was shown that the refinement of information about the operating assets and the proper understanding of the relevant costs and expenses to particular business are essential for determining the fair value of the company and offers more objectivity to the calculation of the related economic value to the set of intangibles assets created.

**Keywords:** Company valuation. Intellectual capital. Goodwill valuation. Goodwill. Intangibles assets.

### 1 INTRODUCTION

The economic valuation of closely-held companies is a complex activity, usually requested by experienced professionals. Often it presents itself with questionable numbers and, often, it ends up submitted to the judicial decision. In part, according to Ornelas (2003), this situation stems from the fragility of the information source for the valuation work, essentially originating from the accounting system of companies, especially when it comes to small and medium size enterprises. Such a contingent of mercantile companies, in general, does not have a sufficiently structured accounting system to efficiently respond to the demands of information and data required by the work involving the company valuation.

An important factor generating controversies about the results of valuations refers to the value attributed, or lack thereof, to the intangible assets created, called intellectual capital, or goodwill, which are perceived by the brand, commercial name, good customer service, prime location and know-how. In relation to such assets, the retiring partners, heirs, widows and procurators have high expectations, in the sense of being cherished with large sums. Such expectation does not always materialize. To a great extent, this hope is fueled by the abundant literature in the field of corporate management and corporate law, which sometimes exacerbate the economic importance of such intangible assets, without, however, associating them with business profitability, and absent from linking to assets, revenue and profit (Damodaran, 2007).

\*Paper presented at the TMS ALGARVE 2016 – Tourism Management Studies International Conference, 16-19 November 2016, Olhão, Algarve, Portugal.

**Submission on 08/16/2017. Revision on 10/26/2017. Accepted on 01/04/2018.**

The purpose of this article is to discuss objective aspects in the determination of economic value for the intangible assets created by the company, within the scope of the process of valuation of closely-held companies, especially small and medium size enterprises (PME). The main contribution of this study consists of gathering and synthesizing concepts and demonstrating a well-founded alternative to the calculation of goodwill. The importance of initiatives of this nature consists mainly in approaching and relating the theoretical basis to the observation of reality.

## 2 REVISION OF THE LITERATURE

The main concepts and theoretical discussions used in the practical applications of this work, specifically the valuation of companies by the approaches of assets and income, determination of the discount rate, the concept of economic value of the business and the question of the intangible created, known as goodwill.

### 2.1 Intangible assets

In relation to the equity of the company, an intangible asset must be identifiable and cannot be confused with the gain derived from the expectation of future profitability of the business, called goodwill, as required by Technical Pronouncement CPC 04 (R1) (Comitê de Pronunciamentos Contábeis, 2010).

Several intangible assets are created throughout the existence of the company and eventually become economic benefits, such as brand name, brand, list of customers, trained team, prime location (point), among others. Such set of attributes is also called goodwill (Santos, 2011). However, they are not recognized in the financial statements, unless they are acquired (Churyk & Mantzke, 2008).

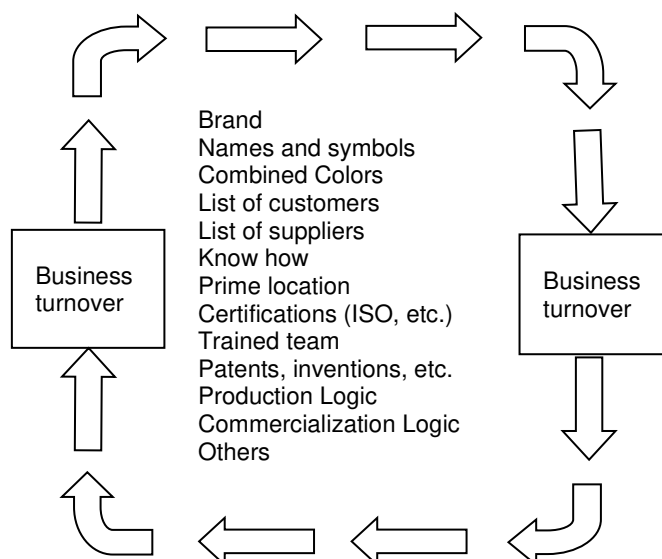
Brazilian corporate law, specifically the Civil Code, Law 10,406/2002, Article 1,031, provides that in the company valuation, for the purposes of settlement of the equity interest, all tangible and intangible assets acquired or created must be considered, shown by means of a special balance sheet. For Sá (2000), the intangible assets result from the increase of functions of the material capital itself and the agents that act on it to boost it and increase the capacity of utility or effectiveness, for the benefit of the business. On the complexity of the isolated measurement of created intangible assets, Clarkson (2000) argues that possibly accounting for identifiable intangible assets does not offer as much insecurity as the isolated valuation of intellectual capital, which is regarded as a comprehensive set of factors of human creation.

According to Watson (2010), many authors consider individualized monetary valuation of intangibles as an effort with debatable benefits. Considering that the amounts cannot be portrayed in financial statements, they are not accepted as collateral for loans and investors are essentially interested in the net leftovers that the business can provide.

In order to evaluate people's opinions about the importance of the components of intellectual capital within their organizations, Axile-Ortiz (2013) performed a survey based on attitudinal tests and concluded that the perception of the economic value of the components of intellectual capital varies in magnitude, depending on the context, which is determined by the geographic area in which it operates, the industry sector, the operational particularities and the size of the organization.

The author states that only human beings can develop intangible assets. The only possible way to manage them is by awareness of their composition and recognition of their value in the organization. They are intrinsic to the human being. Companies cannot incorporate them as external agents, transfer them, package them, market them or buy them in isolation.

The business establishment, constituted of tangible patrimonial assets, by itself, is not the source of creation and sustentation of value for the intellectual capital. The intangible assets are created, strengthened, or destroyed by the dynamics or turnover of the business, as illustrated in Figure 1.



**Figure 1.** Creation and strengthening of intangible assets

Source: Prepared by the author.

Most of the intangible assets that drive the company's profitability are created by the development of the thriving business and have strong interrelationships (Chareonsuk & Chansa-ngavej, 2010). Because of this dependence, most of the intangible assets disappear or lose monetary expression if the company goes bankrupt. In this condition, the brand and name are stigmatized before the market, the list of customers empties, suppliers are afraid to sell and, naturally, the staff dissolves and pursues a career in other companies. This movement compromises the synergies and corporate advantages settled over the years.

Unprofitable or deficient businesses do not direct monetary expression to the intangible assets created because they emerge economically from profits. It should be emphasized that the profits of an efficient business must be higher than that of the proceeds from tangible assets if they are liquidated and invested in low risk financial assets.

## 2.2 Company valuation approaches

The most commonly cited valuation methodologies and approaches are: valuation based on asset value, valuation based on income, valuation based on multiples of comparable transactions and valuation based on options. According to Rabiński (1996), the valuation of a going concern should reflect the value of real estate, machinery and equipment, working capital and all other assets that contribute to the exploration of the business, including the intangible assets created. For the purposes of this review, the focus of discussion will be limited to valuations based on assets and business income.

### 2.2.1 Valuation based on the value of the assets

According to Harris (1997), the ways to measure monetary assets that stand out most are: valuation based on equity value; valuation based on the adjusted equity value; valuation based on the replacement value; valuation based on the settlement value. The equity value method is the simplest of valuations (Robert, 2006). Hawkins (2002) explains that the weak point of the equity value method is its subordination to accounting standards, specifically those that guide the records of operations at their historical cost.

In the valuation based on the adjusted equity value, it is necessary to review and adjust the equity assets, including determining the real value of the intangible assets, such as gain and patents. Any goodwill and premium value records for the acquisition should also be examined and expunged in order to make the special balance sheet value more realistic (Robert, 2006).

In the valuation method based on the replacement value, also referred to as the depreciated replacement cost method, the asset is valued at the cost of its acquisition or reproduction, net of depreciation. Depreciation is defined as the expected useful life of the asset

(Harris, 1997; Lorenz & Lützkendorf, 2008).

The valuation based on the settlement value adopts the market value and consists of determining the balance amounts in terms of net amounts that would be reached in a quick sale or forced sale (Robert, 2006). Helfert (2000) warns that the adoption of the settlement value method applies to an abnormal situation, influenced by time pressures and other constraints, as in the case of sale of bankrupt assets.

The new Brazilian Code of Civil Procedure, Law no. 13,105/2015, art. 606, which became effective in March 2016, establishes a criterion for the indemnification of equity interests to a retiring partner, in determining that "the tangible and intangible assets and rights of the asset, at the exit price, in addition to the liability also to be calculated in the same way" In addition, he expressed concern about the competence of the valuator in determining that the "appointment of the expert would fall preferentially on a specialist in company valuation".

When evaluating a company considering only the identified inventory, the valuation expert disregards the knowledge of the monetary expression of assets that form the intellectual capital, such as goodwill, brand, business synergies and other intangibles created. To avoid such partiality in the company valuation, it is necessary to determine the economic value of the business.

### *2.2.2 Valuation based on the value of the income*

According to Leitner (2005), the value of a closely-held company is based on the return on capital invested and the market perception about its future. For Verginis & Taylor (2004), the income capitalization approach captures the value of a society better than any other approach. Two methods of company valuation are more employed when determining future incomes: valuation based on the value of discounted free cash flow and valuation based on the value of the dividends. In this study the discussion will focus on the valuation based on the discounted free cash flow.

According to Luerhman (2006), Robert (2006), the discounted cash flow method (CDF) is a valuation process in which future free cash flows, including the residual value of the assets, are converted to present value, using a discount rate.

Another key point in the application of the FCD method is the definition of the discount rate. Clarkson (2000) states that the company's cost of capital is represented by the individual cost of capital sources, weighted according to their importance in the capital structure of the company.

In a conceptual simplification, Ross, Westerfield & Jaffe (2007) state that the discount rate is a kind of interest rate used to discount cash flows at their present value and that should be the one that best reflects the opportunity cost and the risks.

## **3 METHODOLOGY**

This study is characterized as a case study. It deals with the company and business valuation within the auto industry, located in the Southern Region of Brazil, involving judicial determination. The methodological procedures for company object valuation of the present case study were based on the system described by Santos (2011).

As a result of research in company valuation reports, the systematics consists of gathering and synthesizing concepts about business and company valuation, making the valuation provisions compatible with Brazilian corporate law standards, specifically those recommended by the Civil Code and Brazilian Code of Civil Procedure. Also, according to Santos (2011), the search for the assets that contribute to the determination of the value of the company revealed three fundamental aspects that should be examined in isolation. These aspects are:

**a) Relations of society:** this aspect deals with the examination and consideration of contractual or statutory provisions; of the dates of the events (exclusion, retirement or death); of the advances and loans of partners, as well as being guided by the main legal and accounting systems for determination of partner or stockholder's assets.

**b) Business establishment:** he business establishment houses the tangible and intangible assets acquired or created by the company, such as cash equivalents, receivables, inventories, real estate, machinery, equipment, brands and use rights, among others. These elements give the support to the realization or exploration of the business.

**c) Business:** this is the object that the company proposes to undertake, operate or explore, with the purpose of generating economic profit. It is the business that creates or destroys value for the partner or stockholder. The criterion of valuation of the business is based on the measurement of the expectation of profits (income).

In order to determine the value of the company, it is necessary to evaluate the equity assets (assets) and measure the expectation of profits, benefits and revenues of the business, in terms of free cash generation. Table 1 lists the activities to determine the value of the company and equity interests.

Table 1

**Activities to determine the value of the company and equity interests**

Specification	
1	Setting the base date
2	Identification of goods and rights
3	Valuation of identified goods and rights
4	Identification of non-operating assets
5	Measurement of the potential of net profit and cash surpluses
6	Determination of the economic value of the company
7	Measurement of goodwill
8	Identification and measurement of company debts and obligations
9	Preparation of the determination balance sheet or special
10	Determination of the value of the quotas or lot of shares

**Note.**Source: Adaptada de Santos. N. J. (2011) *Metodologia para determinação do valor econômico de empresas de capital fechado em processos de apuração de haveres de sócio*. Tese de Doutorado em Engenharia de Produção, Universidade Federal de Santa Catarina (UFSC), Florianópolis, SC, Brasil.

**1) Definition of the base date:** the value of a company is specific to a certain date. The base date or valuation date is the time point, chronological delimiter of the existence of the equity assets.

**2) Identification of assets and rights:** refers to the inventory activity of tangible and intangible assets, susceptible of objective monetary expression that will be submitted to the valuation.

**3) Valuation of assets, rights and debts identified:** the valuation of the assets must adopt different monetary measurement criteria, considering their typology and the operational characteristics. Table 2 presents the guidelines or criteria for the valuation of assets, rights, debts and obligations.

Table 2

**Criteria for equity asset valuation**

Equity assets	Valuation criteria
<b>Assets and rights</b>	
Cash and cash equivalents	Book value.
Credits	Book value adjusted to present value.
Inventories	Market value less marketing expenses.
Expenditure for subsequent years	Book value.

**To be continued**

Table 1 (continued)

Equity assets	Valuation criteria
<b>Assets and rights</b>	
Investments	Book value, equity accounting value or market value.
Fixed assets	Land - market value.
	Buildings, furniture and equipment - Value of reproduction (replacement) or market.
Intangible	Economic value.
Financial leasing	Cost. Record the installments to be paid as debt.
<b>Debts and obligations</b>	
Suppliers payable, taxes payable and salaries payable	Book value.
Loans and financing payable	Present value, as if they were settled at the valuation date.
Tax, labor and civil risks	Value based on specific surveys.

**Note.** Source: Adaptada de Santos, N. J. (2011) *Metodologia para determinação do valor econômico de empresas de capital fechado em processos de apuração de haveres de sócio*. Tese de Doutorado em Engenharia de Produção, Universidade Federal de Santa Catarina (UFSC), Florianópolis, SC, Brasil.

**4) Identification of non-operating assets:** Assets and rights that have no influence on the generation of operating revenues, such as leaseholds, redundant equipment and installations without justification, among others, should be segregated. For the purpose of valuing the company, such assets may be made available for sale immediately (Damodaran, 2007).

**5) Measurement of profit potential and net cash surplus:** this includes the estimate of billing, costs, expenses, taxes and net cash surplus, using the discounted cash flow methodology, which is summarized as follows:

Profit before interest and taxes (EBIT)  
 (-) Taxes on profit  
 (+) Depreciation and other charges that do not involve cash outflows  
 (-) Need for additional working capital  
 (-) Thefts with enlargement or replacement of assets (CAPEX - *capital expenditure*)  
 (+) Residual value of assets  
**= Free cash flow**

The discount rate on future earnings should be stipulated with the consent of partners and stockholders, so that variables can be found without major difficulties. Santos (2011) proposes the following formula:

$$TD = (I + R + P) \times (1-T) \quad (1)$$

On what:

TD = Discount rate  
 I = Rate of remuneration in application of low risk  
 R = Business risk premium  
 P = Country risk premium  
 T = Income tax rate on financial investments

The rate resulting from this formula refers exclusively to the expectation of remuneration of equity capital. This is justified because in this valuation methodology, the debts and obligations of the company are considered at their valuation date, according to Law 13,105/2015. Therefore, it does not matter the cost of third-party capital.

**6) Determination of the economic value of the company:** it is composed of specific elements identified and previously measured, as follows.

Potential for profits and net surplus cash

(+) Cash and cash equivalents

(+) Non-operating assets

**(=) Economic value of the company**

The economic value found in this expression should be compared with the value of the assets valued and adopted as the value of the company, the largest.

**7) Measurement of goodwill:** the value of the intangible asset created - goodwill - is contained in the economic value of the company. This monetary expression is obtained by the difference between the economic value of the company and the value of the identified assets valued.

Economic value of the company

(-) Value of assets identified and valued

**= Value of goodwill**

In the situation where the value of the equity assets identified is equal to or greater than the economic value of the company, it is then said that there is no monetary expression for the goodwill.

**8) Identification and measurement of debts and obligations of the company:** In the system in presentation the debts and obligations are identified and valued as if they were settled at the base date of the valuation of the company.

**9) Preparation of the determination balance sheet:** this is a specific balance sheet, which will contain:

Value of assets identified and valued

(+) Intangible assets created (*goodwill*)

(-) Debts and obligations

**= Net balance corresponds to the total value of the equity interests**

**10) Determination of the value of the quotas or lot of shares:** the value of the individual equity interest will be calculated based on the percentage of the capital that the retiring partner owns.

#### 4 ECONOMIC VALUATION OF THE COMPANY GAMA – CASE STUDY

The case presented below refers to a real situation of company valuation, prepared in compliance with the judicial determination. Company Gama was one of the assets that constituted the bankrupt estate of a business group. At the valuation date it was operating normally, and at full capacity, but should be sold to clear debts from the bankrupt. The name of the company as well as the values involved are not characterized by confidentiality issues.

##### 4.1 Valuation procedures

The company Gama is a closely-held company, of medium size, was established in 1978 and is located in Santa Catarina, Southern Region of Brazil. Its business is to provide solutions in projects and technology in the market of thermosets and thermoplastics, destined mainly to the auto industry.

The assumptions and valuation guidelines were defined by the valuation expert, listening to the directors and executives of the company, as presented in Table 5, below. Based on the

data provided and information provided by the Company Gama, the procedures and the calculations recommended in the systematic of the economic company valuation, available in Santos (2011), were performed:

**1) Definition of the base date:** the base date of the company valuation was defined as 03/31/2016, when the valuation work began.

**2) Identification of assets and rights:** the procedure for identifying the collection of assets and rights adopted the balance sheet prepared at the base date, received administrative and production data to complete the inventory.

**3) Valuation of identified assets and rights:** the assets included in the accounting balance sheet were reviewed and valued, respecting the guidelines and criteria presented in Table 2. The revision of the values consisted in confirming the existence of the asset or right and verifying the realization capacity in cash of the equity asset. After these procedures, the special balance sheet, presented in Table 3, was prepared.

Table 3  
**Special Balance Sheet –Company Gama- \$ 1.00**

Asset	Value	Liabilities	Value
<b>Current assets</b>	<b>42,548</b>	<b>Current liabilities</b>	<b>25,263</b>
Cash and cash equivalents	18,260	Suppliers payable	15,372
Accounts receivable from customers	12,450	Taxes to pay	9,891
Taxes recoverable	3,219	<b>Non-current liabilities</b>	<b>26,811</b>
Other values to be performed	1,891	Taxes in installments	9,432
Inventories	6,564	Financing payable	17,379
Expenditure for subsequent years	163		
<b>Non-current assets</b>	<b>52,248</b>	<b>Net position</b>	<b>42,722</b>
<b>Long-term receivables</b>	<b>4,640</b>		
Long-term receivable credits	3,171		
Compulsory deposits	1,469		
Investments	12		
Fixed assets	<b>47,596</b>		
Real Estate	19,184		
Buildings and improvements	12,468		
Vehicles	83		
Machinery, equipment, facilities, furniture and utensils	15,861		
<b>Total assets</b>	<b>94,796</b>	<b>Total liabilities</b>	<b>94,796</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**4) Identification of non-operating assets:** Long-term receivables, equity investments and a portion of Production Unit II land were treated as non-operating assets. This understanding was reached after analyzing the essentiality of these assets for the achievement of operating revenues from the business being exploited.

Table 4  
**Non-operating assets – Company Gama - \$ 1.00**

Description	Value R\$
Long-term receivable credits	3,171
Compulsory deposits	1,469
Investing in shares	12
Part land Unit II - Compound Plant	3,623
<b>Total</b>	<b>8,274</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**5) Measurement of the potential of profits and net cash surplus:** this part of the valuation comprised the following activities:

- critical analysis of revenues, costs and expenses;
- definition of the growth rate of revenues and projection horizon;
- identification of the form of taxation of profit;
- examination of compliance of documents and accounting books;
- identification of the need for additional working capital;
- identification of the need for replacement and expansion of fixed assets;
- determination of the terminal or residual value of fixed assets;
- definition of the discount rate.

A set of information, assumptions and guidelines for composing discounted cash flow (FCD) was defined in agreement with the company's managers, as shown in Table 5.

Table 5

**Information, assumptions and guidelines for composing the FCD**

Specification	Data/Information
EBIT 2016	\$ 16,650
EBIT 2017	\$ 17,775
EBIT 2018	\$ 19,725
EBIT 2019	\$ 20,130
Projection horizon	4 years, with perpetuity.
Form of taxation of profit	Real profit
Depreciation/ Amortization allocated to cost and expenses	\$ 2,122
Income tax and social contribution on net profit	34%
Compliance of accounting documents and books	Without reservations
Need for additional working capital 2016	\$ 469
Need for additional working capital 2017	\$ 869
Need for additional working capital 2018	\$ 197
Need for additional working capital 2019	0
Need to replacement and expansion of assets	9% on depreciable fixed assets
Terminal or residual value of assets	0
Discount rate	17.10%

**Note.** Source: Elaborated by the author with modified data of the company Gama.

The projection of operating revenues considered sales growth in the years 2017, 2018 and 2019, based on the sector study commissioned by the valuation expert. No new gains in productivity or savings were considered for productive efficiency.

For the establishment of the discount rate, the Brazilian government bond yield rate (SELIC), increased by 50%, was adopted, corresponding to the risk premium of the business. The percentage corresponding to country risk was considered implicit in said SELIC rate.

The calculation of the discounted cash flow was performed in two procedures. The first consisted of gathering the values that generate free cash in the periods, as shown in Table 6. The second procedure included calculating the present value of these free cash, using the discount rate stipulated in 17.10%.

Table 6  
**Calculation of Free Cash Flow - \$ 1.00**

Specification	2016	2017	2018	2019 onwards
EBIT	16,650	17,775	19,725	20,130
(-) Income and social contribution taxes on net profit	(5,661)	(6,044)	(6,707)	(6,844)
(+) Depreciation of fixed assets	2,122	2,122	2,122	2,557
(-) Replacement and expansion of assets (CAPEX)	(2,557)	(2,557)	(2,557)	(2,557)
(-) Need for additional working capital	(469)	(869)	(197)	-
<b>Free cash flow</b>	<b>10,085</b>	<b>10,427</b>	<b>12,386</b>	<b>13,286</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

As specified in Table 7 below, the final cash balances in the projected periods were translated to present value. From the fourth year the depreciation value was equal to the value of CAPEX. Also from the fourth year the values were transformed into perpetuity, which is also understood as the residual or terminal value of the operating assets used in the cash generation.

Table 7  
**Discounted cash flow - \$ 1.00**

Specification	2016	2017	2018	2019 onwards
Free cash flow	10,085	10,427	12,386	13,286
Discount factor	0.89	0.76	0.65	3.79
Discounted cash flow	8,959	7,910	8,024	50,334
<b>Total</b>		<b>75,227</b>		

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**6) Determination of the economic value of the company:** based on the values found in previous provisions, the economic value of the company was established. Table 8 shows the assets that make up this value.

Table 8  
**Economic value of the company – \$ 1.00**

Specification	Value
Potential of profits and net surplus cash	75,227
Cash and cash equivalents	18,260
Non-operating assets	8,274
<b>Economic value of the company</b>	<b>101,762</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

It should be emphasized that by adopting the income approach to evaluate equity interest, using the discounted cash flow methodology, the evaluator is not attributing future profits to the retiring partner or the seller of the company. Discounted cash flow complies with the task of measuring the benefits and monetary income arising from a profitable business left to the acquiring or remaining partners.

**7) Measurement of goodwill:** it is determined by the difference between the economic value of the company and the value of the assets identified and valued, as shown in Table 9.

Table 9  
**Value of goodwill – \$ 1.00**

Specification	Value
Economic value of the company	101,762
(-) Assets identified and valued	(94,796)
<b>Value of goodwill</b>	<b>6,965</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**8) Identification and measurement of debts and obligations of the company:** have been confirmed and are expressed in values of the date of the company valuation, as specified in Table 10.

Table 10  
**Value of debts and obligations of the company – \$ 1.00**

Specification	Value
<b>Current liabilities</b>	<b>25,263</b>
Suppliers payable	15,372
Taxes to pay	9,891
<b>Non-current liabilities</b>	<b>26,811</b>
Taxes in installments	9,432
Financing payable	17,379
<b>Total</b>	<b>52,074</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**9) Preparation of the determination balance sheet:** this procedure consists of demonstrating all assets and rights, tangible and intangible, including the value of goodwill, as well as the debts and obligations in current values, basis of calculation of the equity interest, according to the new Brazilian Civil Procedure Code. Table 11 shows the main values of the determination balance sheet or special.

Table 11  
**Determination balance sheet or special summary - \$ 1.00**

Specification	Value
Cash, credits and inventory	42,548
Achievable in the long run	4,640
Investments	12
Immobilized	47,596
Intangible (Goodwill)	6,965
<b>Total assets and rights</b>	<b>101,762</b>
<b>Total debts and obligations</b>	<b>52,074</b>
<b>Net position</b>	<b>49,688</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

**10) Determination of the value of quotas or lot of shares:** The purpose of the valuation under study was to determine the total value of the company, specifically the new value of the total capital quotas, as specified in Table 12.

Table 12  
**New value of capital quotas**

Specification	Value
Assets identified and valued	94,796
<i>Goodwill</i>	6,965
<b>Subtotal</b>	<b>101,762</b>
(-) Debts and obligations	(52,074)
<b>New value of capital quotas</b>	<b>49,688</b>

**Note.** Source: Elaborated by the author with modified data of the company Gama.

It can be seen that the new value of the capital quotas contains a relevant portion of 14%, which refers to the value of goodwill. Thus, it is true to say that profitable deals provide attractive remuneration to the invested capital and at the same time value the individual equity interests.

#### **4.2 Analysis of results: objective aspects in the verification of the economic value of intangible assets**

The effort employed in the calculations previously presented aimed at reducing the subjective character of the procedures that culminate in the economic value of the company. Coincidentally, the monetary expression attributed to goodwill resulted from accounting and mathematical treatments. It involved primarily billing revenue, costs, operating expenses and taxes pertaining to the business specifically.

The value of the goodwill added to the other equity assets of the company Gama corresponds to the excess portion that the profitable business is capable of generating when faced with the value of the respective assets required to achieve the business being exploited. The number found did not depend on personal qualitative perceptions or views of interest groups. The method used exclusively representative values of the generation capacity of profits, considering sector factors, national economic and social variables, as well as the history of production and sales.

The valuation process of the company Gama did not consider the individualization of values concerning the intangible attributes, such as brand name, brand, know-how, prime location and trained team. The positioning was due to the lack of interest of the managers for such information, considering that the procedures for the disposal of the company do not include this detail. Also contributing to such a decision was the fact that the valuation methods then available were essentially subjective and frankly debatable. Intangible attributes are interrelated and depend on each other; they argue (Chareonsuk & Chansa-ngavej, 2010). Under these conditions, such elements have value for the set. In isolation they lose objective monetary expression.

## **5 CONCLUSION**

The purpose of this article was to discuss objective aspects in the determination of economic value for the intangible elements created by the company. A case study was carried out involving a medium size private enterprise, which operates in the auto parts area. The valuation process of the company Gama adopted two traditional and widely considered approaches: asset approach and income approach.

The measures concerning the approach to the assets included the valuation of the patrimonial elements identified. They involved tangible and intangible goods and rights. The properties were valued at market values and the debts were raised and valued at the valuation date of the company. Such treatment fully complied with the Brazilian laws, in relation to the valuation of mercantile companies. However, under these conditions, it would be absent to measure the monetary expression of the intangible elements created by the turnover of the business.

The purpose of the income approach was to determine the value of the business, in which the numeric expression corresponding to the expected future profits, benefits and economic income was presented. The result found in this procedure was used to determine the value of goodwill, considering that such number can only be found indirectly, by comparing the values found in the two approaches. Thus, in the valuation of the economic value methodology, the value of goodwill is a positive difference arising from the profitable business, whose present value exceeds the value of the goods and rights identified (Hendriksen & Breda, 1992).

The study revealed that certain valuation measures are essential for an adequate survey of the monetary expression of the business. They refer to the critical examination of revenues, costs, expenses and taxes, in order to refine the numbers that relate to the business being valued. The accounting reports naturally contain values that are independent of the business,

such as non-operating revenues, court indemnities, fines and attorneys' fees, among others, which have been expurgated from the calculations under discussion.

Knowledge of industry performance indicators, national economic perspectives, and the company's own strategic planning under valuation served as a basis for estimating revenue growth.

The form of valuation adopted in the case of the company Gama provided objectivity to the calculations and values found because it was determined from numbers directly related to the business explored. The monetary expression of goodwill did not depend on personal scores or representative concepts of interest groups, except for business planning estimates.

The individual economic value of intangible elements, such as name, privileged location, trained team and know-how, among others, was not calculated, due to the lack of interest of the managers. In addition, research indicates that such elements are interrelated and dependent on each other to generate business advantage and competitiveness.

As a suggestion for the next studies, it is proposed to apply the valuation methodology by economic value in companies that operate in other economic activities, with the purpose of verifying their applicability in general. Research should also be performed aiming at the formulation of objective criteria for calculating the individual monetary expression of the intangible elements created by the turnover of the business.

## REFERENCES

- Axile-Ortiz, M. A. (2013). Perceiving the value of intangible assets in context. *Journal of Business Research*, 66, 417-424.
- Chareonsuk, C., Chansa-ngavej, C. (2010). Intangible asset management framework: an empirical evidence. *Industrial Management & Data Systems*, 110(7), 1094-1112.
- Churyk, N.T., Mantzke, K.L. (2008). The relation between purchased goodwill and target characteristics. *Academy of Accounting and Financial Studies Journal*, 12(3), 19-18.
- Clarkson, G. (2000). *Intellectual asset valuation*. Harvard Business School. 9 (-801-192), 1-23.
- Comitê de Pronunciamentos Contábeis (2010). *Pronunciamento Técnico CPC 04: Ativo Intangível*. Brasília. Recuperado de [http://static.cpc.mediagroup.com.br/Documentos/187\\_CPC\\_04\\_R1\\_rev%2008.pdf](http://static.cpc.mediagroup.com.br/Documentos/187_CPC_04_R1_rev%2008.pdf)
- Damodaran, A. (2007), *Avaliação de empresas (2a ed.)*. São Paulo: Pearson Prentice Hall.
- Harris, R. S. (1997). *Valuing companies: an overview of analytical approaches*. University of Virginia - Darden Business Publishing. UV0107. Charlottesville, VA.
- Hawkins, D. F. (2002). *Basic ratio analysis end equity valuation*. Boston. Harvard Business School, 9,185-149.
- Helfert, E. A. (2000). *Técnicas de análise financeira: um guia prático para medir o desempenho dos negócios (9a ed.)*. Porto Alegre: Bookman.
- Hendriksen, S. E., & Breda, M. F. V. (1992). *Accounting theory (5nd ed.)* Illinois: Irwin.
- Lei nº 10.406, de 10 de Janeiro de 2002* (2002). Institui o código civil. Recuperado de [http://www.planalto.gov.br/ccivil\\_03/Leis/2002/L10406.htm](http://www.planalto.gov.br/ccivil_03/Leis/2002/L10406.htm)
- Lei nº 13.105, de 16 de Março de 2015* (2015). Institui o código de processo civil. Recuperado de [http://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2015/lei/l13105.htm](http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/l13105.htm)
- Leitner, P. (2005). Measure twice, cut once: creating and measuring value in the private firm. *Strategic Finance*, 87(3). 26-32.
- Lorenz, D., & Lützkendorf, T. (2008). Sustainability in property valuation: theory and practice. *Journal of Property Investment & Finance*, 26(6), 482-521.
- Luerhman, T. A. (2006). *Note corporate valuation and market multiples*. Boston. Harvard Business School, 9, 206-039.

- Ornelas, M. M. G. (2003). *Avaliação de sociedades: apuração de haveres em processos judiciais* (2a ed.). São Paulo: Atlas.
- Rabianski J. S. (1996). Going-concern value, market value, and intangible value. *The Appraisal Journal*, 64, 183-194.
- Robert, M. J. (2006). *Valuation concepts: evaluating opportunity*. Boston. Harvard Business School Publishing.
- Ross, S. A., Westerfield. W., & Jaffe, J.F. (2007). *Administração financeira* (2a ed.). São Paulo: Atlas.
- Sá, A. L. (2000) Ativo intangível e potencialidades dos capitais. *Revista Brasileira de Contabilidade*, 125, 46-53.
- Santos, N. J. (2011). *Metodologia para determinação do valor econômico de empresas de capital fechado em processos de apuração de haveres de sócio*. Tese de Doutorado em Engenharia de Produção, Universidade Federal de Santa Catarina (UFSC), Florianópolis, SC, Brasil.
- Verginis, C. S., & Taylor, S. J. (2004). Stakeholders' perceptions of the DCF method in hotel valuations. *Property Management*, 22(5), 358-376.
- Watson, R. (2010) Small and medium size enterprises and the knowledge economy. *Journal of Financial Regulation and Compliance*, 18(2), 131-143.