

## METHODS DESIGNED TO DETERMINE THE VALUE OF THE FIRM AND THEIR DEFICIENCIES

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*Determining the value of a company is a process very important and controversial at the same time process. Knowing the value of a firm is indispensable in case of sale, merger, but not only; it is also useful to identify sources of value creation. The value of a firm is influenced by several factors, such as quantitative factors: future performance, assets, capital structure, cash flows, rate of return; and qualitative factors that largely determine firm's performance and its' value. Among these factors can be remembered: the reputation, the loyalty of customers, training and experience of employees, a strong management team, holding any secret manufacturing, trend working in the field of business, geographical location.*

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*JEL classification: G3*

### **The value of the firm - between present aspects and future prospects**

Determining the value of a company is a process very important and controversial at the same time process. Knowing the value of a firm is indispensable in case of sale, merger, but not only; it is also useful to identify sources of value creation. There is no standard method used for determining the value of the company, but it differs depending on the purpose, being a process that involves a high degree of subjectivism. Subjectivity of determining the value of the company was illustrated by the specialists from Blackbaud from a simple question: in what situations it is necessary to know the company's value? It is a simple question with a complex answer. The answer follows the logic of the problem, namely: in case of sale, in case you wish to attract capital from investors, in case of business division, in case of a merger, if one owner wishes to retire from the firm. Changing the problem, it will change the established value of the company. Thus, if there is such a withdrawal of one of the owners, the other owner will still try to award the company a value as low. Instead in case of sale, merger or raising capital from investors will pursue the establishment of a value as high<sup>97</sup>.

Value should not be confused with price; the relationship is explained by Pablo Fernandez in his work *“Company valuation methods. The most common errors in valuations”*. The price represents the value accepted by the seller and buyer in the sale of a company. The value of both companies differs from seller to buyer, as well as between different customers. For example a foreign company wants to buy a local known company in order to expand its market, benefiting by the local brand. Buyer will determine the value of the company that intends to acquire according of its brand, not to the infrastructure available to it. In the same time, the seller will try to give value to the company through the assets the firm owns, setting a minimum value that is willing to accept.

Knowing the company's value is very important and useful in many situations faced by the company and certain actors of the external environment, during its existence, namely<sup>98</sup>:

- The company's value represents the maximum price that the buyer would be willing to pay, and the minimum that the seller would be willing to accept.
- The company's value influences the price of shares.

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97 Lamb David – Private Company Valuation and the Prospect Researcher, available at [www.blackbaud.com](http://www.blackbaud.com).

98 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449.

-For companies listed on the stock market, the company's value is compared to the price of shares and in this way the shareholder bases his decision to sell, buy or maintain the shares.

-Comparative analysis of the values of several listed companies affect the structure of securities portfolio, preferring securities that are being underscored at the market, ie when the firm's value is lower than the its market value, given by the price per share multiplied by the number of shares issued.

-The process of setting the company's value helps to identify sources of value creation.

-The level of firm's value affects the owner's decision to continue the business, to sell it, to merge with other companies, to expand it, to buy other companies.

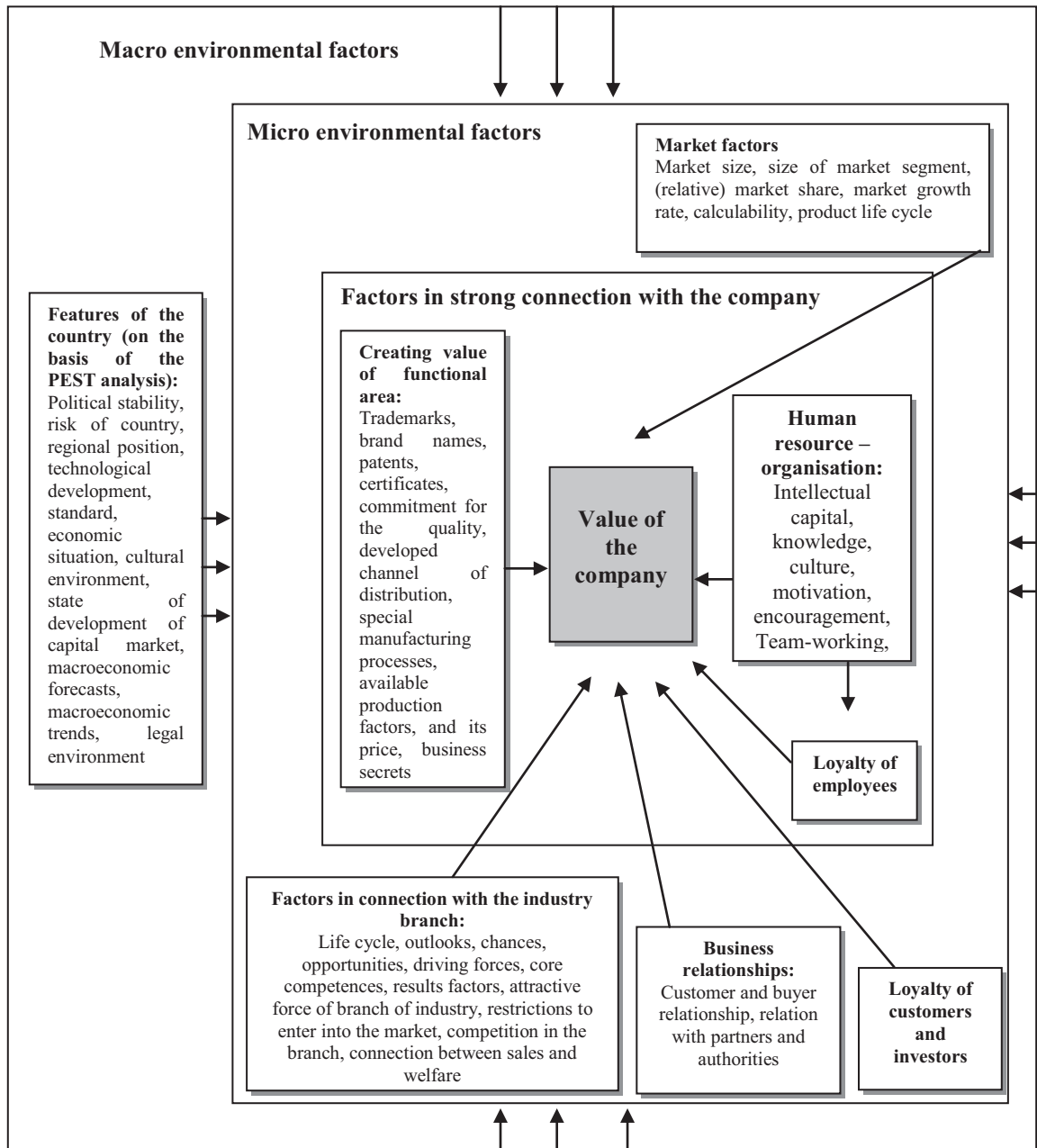
The value of a firm is influenced by several factors, such as quantitative and qualitative or intangible factors. **Future performance** foreseeable by a potential buyer exercises a direct influence on the company, linked to the level of expected income. **Capital structure** of the firm is another factor that influences the value of the firm, meaning that a company obliged worth more than one who has not resorted to loans because of lower cost of borrowed capital compared with the cost of own capital, even more, the interest expense is a deductible expense, generating in this way a fiscal advantage. **Assets** of a company have a major influence, but contradictory, in determining the amount of company's value. One company benefiting from modern technologies clearly worth more than one with similar equipment outdated, but a business which has a high level of assets will be worth less than one that does not involve a significant assets base, because in the first case a large part of the profit should be reinvested in the replacement of these assets, when they reach a complete depreciation. **Rate of return** expected by a potential buyer indirectly affects the firm's value; if the buyer expects a high future returns, the company assigns a lower value. The value of **cash - flow** is directly related to the company's value; the discounted cash flow method is a current method which is very used in determining the value of a company. Experts from Business Development Solutions, following a study, have found that small businesses tend to sell for the amount of 2 to 4 times the annual cash - flow value, and medium businesses with 3 to 6 times the latter. But there are also exceptions<sup>99</sup>.

The value of a company is not only dependent on financial factors or tangible assets. A major influence has also the qualitative factors and **intangible assets**. Current models for determining the value of the company take into account only quantitative factors, directly quantifiable, without making reference to those factors perhaps more difficult to quantify directly in money, but which often make the difference between performance of firms, and between their default values. For example, two offices of financial advice can value the same due to the methods based on tangible assets, but in reality a significant influence on the value of these companies has the prestige, experience and skills of the consultant, a factor which has no direct quantification, but can be found ways of measuring, for example through tariffs which are putting pressure directly on the level of income and cash flows.

Generally, it can be said that intangible, **qualitative factors**, largely determine firm's performance and its' value. Among these factors can be remembered: the reputation, the loyalty of customers, training and experience of employees, a strong management team, holding any secret manufacturing, trend working in the field of business, geographical location, etc

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99 www.bizacquisition.com.



**Source:** Agnes Horvath – Non-quantitative measures in company evaluation, European Integration Studies, Miskolc, Volume 4, Number 1(2005), page 66.

Current methods used in determining the value of the firm are quite numerous, but are not standardized; they vary from country to country depending on the accounting system practiced. Another important statement to make at the outset is that these methods can be applied in general only for large businesses, and not for SMEs.

Pablo Fernandez, in his work “*Company valuation methods. The most common errors in valuation*” achieves a comparative presentation of these methods, pointing through practical examples the value of a company obtained by applying different methods of valuation.

**Balance sheet – based methods**<sup>100</sup>, these methods determine the value of the company based on its assets value. In this category belong the following methods: book value, adjusted book value, liquidation value (which represents the minimum value of a company), substantial value. These methods which rely solely on accounting data, which are static data, skipped several major influences, they do not take into account the future development of the company, quality of human resources, etc.

Asset-based methods, as are also called, are more suitable for manufacturing enterprises, because they have tangible assets of significant value, such as technologies, equipment, buildings, land that can be evaluated quite easily, starting from the market value of them. In the case of companies whose business does not involve possession of tangible assets with higher values, these methods are unfavorable, minimizing their value of some assets such as goodwill, the exposure on the market, seen as intangible assets which are not quantified in money in financial reportings and which are not taken into consideration by accounting data.

Starting from these deficiencies have been implemented a number of methods called **revenues based methods** of determining the value of the firm. They take into account to determine the value of company profits or annual income reported by the firm. It is a fairly common practice to establish a rapid and nearly value of the company by multiplying the annual revenue with a multiplier that varies depending on the industrial branch of the company, and on the market situation. For example, accounting firms have a value of about 100-125% of annual revenues; bookstores have a value equal to approximately 15% of annual sales plus inventory, offices of law firms have a value of between 40-100% of annual income; supermarket's worth 8-10% of annual revenue plus inventory, travel agencies worth about 40-45% of annual fees collected.<sup>101</sup>

**Cash Flow Discounting based method**<sup>102</sup> is the most used method for determining the value of the firm. According to this method the value of a company is the total cash earnings of the firm realizes that during its existence. The value of a company is the discounted value of its expected cash flows in the future. However this method presents some weaknesses related to:

- Can be applied with success only in a stable environment, the company exceeded its launch phase and is not in decline.
- The cash flow forecast is not very precise, may occur considerable deviations from the real one.
- Failure in taking into account the inflation rate.
- Update rate may be set wrong, and it should be related with foreseeable risk.
- Error in determining the residual value.
- Depending on the purpose for which the company's value is set, the person who calculates it may intend to show optimism in the forecast cash flow, working hard to combat.

**Valuation with multiplication indicators**<sup>103</sup> is based on comparison of company indicators. The most used indicators are Price (P)/Earnings, P/Sales, P/EBIT, P/EBITDA. In the case of listed companies these indicators are easy to find out. For companies that are not listed, average

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100 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449, page 4-6.

101 These data are from The Business Reference Guide published by Business Brokerage Press, available at <http://www.bizstats.com/reports/valuation-rule-thumb.asp>.

102 Agnes Horvath – Non-quantitative measures in company evaluation, European Integration Studies, Miskolc, Volume 4, Number 1(2005), page 62-63.

103 Idem 1

indicators of listed companies and the ones operating in the same sectors are taken into account, as their indicators are easy to compute. Disadvantages of this method are related to the fact that if a firm starts work in an area completely new method that may not apply. Such a method was presented by INC. Magazine, and it establishes a indicative value of a company, but however useful to know.

**Evaluation based on economic value added (EVA)**<sup>104</sup> is a measure of the value a company has created during a certain period, and provides similar results to discounted cash flow method.

**Market value**, it is a method that can be used only for the listed companies. In this case the value of the firm it is very simple to find out by multiplying the number of the stocks issued by the firm with the price, established on the Stock Exchange.

**Mixed methods**, which combine the balance-sheet methods with the level of goodwill. Generally, goodwill represents the value of the company's intangible assets, which often do not appear on the balance sheet. The problem arises when trying to evaluating the goodwill, which consist of elements difficult to measure directly, such as: brand, market position, portfolio of customers, strategic alliances.

Among these methods there are<sup>105</sup>:

-*The classic valuation method*. This method states that a company's value is equal to the value of its net assets plus the value of its goodwill; ad the goodwill is valued as "n" times the company's net income.

$V = A + (n * B)$  V- value of the firm; A-net assets; n-coefficient between 1.5 and 3 B- net income.

-*Union of European Accounting Experts method*

$V = [A + (an * B)] / (1 + ian)$  A- corrected net assets; an- present value, of n annuities, with n between 5 and 8 years ; B- net income; i- interest rate obtained by an alternative placement.

There is a simplified variant of this method:

$$V = A + an(B - iA) \quad an(B - iA) - \text{goodwill}$$

In this case the goodwill represents the capitalization of a super profit (B- iA).

-*Anglo-Saxon method*:  $V = A + (B - iA) / tm$

In this case the value of the goodwill is obtained by restating for an indefinite duration the value of the super profit obtained by the company. The rate tm is the interest rate earned on fixed income securities multiplied by a coefficient between 1.25 and 1.5 to adjust the risk.

**Benchmarking** is an empirical method to find out the value of a company by comparing the target company to a similar one. This method can be used when you don't have access to detailed financial information from inside the company. In this case a possible option is to find comparable companies whose values are known.

As it can be noticed, the balance sheet methods are past oriented, book values of the firms are usually lower than the market value, and as a consequences, in the past decades market evaluations of companies have become much more independent from accounting data. It can be express a stronger relation between earnings and company's value, but the real value of a company does not take into account only her capacity to generate earnings. Nowadays, the cash flow discounting method is generally used, because it is considered by some specialists to be the only conceptually correct valuation method. In this method, the company is viewed as a cash flow generator and the value of the company is obtained by calculating these cash flows' present value using a certain rate of discount, but also this method has its own shortcomings.

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104 Idem 1

105 Pablo Fernandez – Company valuation methods. The most common errors in valuations, IESE Working Paper No 449, page 10-12.

A company is valuable not only it possesses assets, generates cash flows, and it obtains earnings, but a large contribution to the value of a company have the loyalty of the employees, fidelity and satisfaction of the customers, business relationship with the investors, with the suppliers, the professional quality and the experience of the work force, products' quality, the company's brand, good management, the market position. There is a great need for methods on the basis of which not only financial indicators, but also qualitative once, based on intangible assets can be analyzed<sup>106</sup>.

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<sup>106</sup> Agnes Horvath – Non-quantitative measures in company evaluation, European Integration Studies, Miskolc, Volume 4, Number 1(2005), page 70-71.