COMPANY VALUATION METHODS BASED ON PATRIMONY

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Abstract
The methods used for the company valuation can be divided into 3 main groups: methods based on patrimony, methods based on financial performance, methods based both on patrimony and on performance. The company valuation methods based on patrimony are implemented taking into account the balance sheet or the financial statement. The financial statement refers to that type of balance in which the assets are arranged according to liquidity, and the liabilities according to their financial maturity date. The patrimonial methods are based on the principle that the value of the company equals that of the patrimony it owns. From a legal point of view, the patrimony refers to all the rights and obligations of a company. The valuation of companies based on their financial performance can be done in 3 ways: the return value, the yield value, the present value of the cash flows. The mixed methods depend both on patrimony and on financial performance or can make use of other methods.

Keywords: *net assets, corrected net assets, revalued net assets, permanent operating capital, gross substantial value, net substantial value.*

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1. Introduction and context of the study

This article aims to provide new insights into the methods used for the valuation of companies. The specialists do not fully agree on the real value of companies. The patrimonial methods result from the data previously provided by the balance sheet, but we are not sure whether they will be the same in the future. The methods based on performance rely on information from the profit and loss account and consider receipts which may or may not be borne out by reality. The mixed methods combine the characteristics of the first two methods.

This work is a result of scientific research, based on the analysis of literature regarding the valuation of companies.

2. The patrimonial methods

A performance analysis should not be solely based on these methods for these 2 types of balance sheets show a static analysis at one moment in time. The companies can apply some "make-up" techniques to the balance sheet data. Therefore, a company that wants to show that it has high liquidity, can get a long- term loan, which will appear in the upper portion of the balance sheet and which will be repaid at the beginning of the following year. Another "strategy" of enhancing the liquidity can be the overvaluation of inventories without taking into account the net realizable value.

The methods used for the company valuation can be divided into 3 main groups:

1) Methods based on patrimony;
2) Methods based on financial performance;
3) Methods based both on patrimony and on financial performance.

The patrimonial methods are defined by the principle that the value of the company equals the value of its patrimony. From a legal point of view, the patrimony refers to all the rights and obligations of a company.

In accounting, the patrimony includes the assets, the debts and shareholders' equity of the company. The assets refer to intangible, tangible, financial assets as well as to the current assets: inventories, debts, cash funds, short term financial investments, expenditures in advance. There are long term and medium term debts, payables (debts owed to suppliers, employees, the state, and shareholders), current loans. The company's capital represents the residual interest of the shareholders in the assets of the company after the deduction of all debts.

Patrimony = Net assets = The value of assets – Incurred debts

The optimal financial structure between the company's capital and its debts is a favourite theme of financial management which aims to obtain the best performance.

The patrimonial values that can be determined for a company are the following: net assets (ANC), corrected net assets (ANCC), revalued net assets (ANR), permanent operating capital (CPNE), net assets in liquidation (ANL), substantial value (VS).

3. Net assets (ANC)

The net assets consist of the items found in the balance sheet, no matter if they take part or not in the operating process. The net assets **do not reflect the current value** of the company for the following reasons:

a) the items from the balance sheet are registered at a historical cost, or this value does not reflect their current and real value;

b) the existence of items left out or partially reflected by the balance sheet (voluntary hidden reserves or the variation risks of the value of some balance sheet items).

The patrimonial values that can be determined are the following:

1) The book value of the company is given by the **net assets (ANC):**

ANC = Total assets – Total debts = Shareholders' equity + Net result (after distribution)

2) The value of the company represents the market value of the **economic assets**. The value of the company is equal to the market sum of the shareholders' equity (exchange market capitalization if the entity is quoted) and the market value of the net debt. As a matter of fact, the net debt consists of the net result obtained from the use of the borrowed capital [1]. The economic assets (AE) are determined according to the following equation:

$$\mathbf{AE = CPR + DAT}_{FIN} \mathbf{= IMO + ACR}_{NETE}$$

CPR = shareholders' equity

DAT_{FIN} = financial debts (on a long term)

IMO = the net value of intangible assets

ACR_{NETE} = Floating assets – Current debts

3) The real value of the company is given by the financial statement which includes the market values of the assets and liabilities and not the book values, or historical values which are not updated in every case.

4. The corrected net assets (ANCC)

The corrected net assets (adjusted) ANCC are obtained following the revision of the balance sheet and the elimination of the non-value activities, the revaluation of assets, debts, equity investments, obligations, as well as the correction of asset values in keeping with the utility criterion [5].

The steps necessary for the determination of the ANCC are the following:

a) The division of all balance sheet assets in assets necessary for operations and assets outside the operation (holiday houses, company housing, luxury boats);
b) Revaluation of operating assets;
c) The mathematical calculation of ANCC.

The operating assets will be revalued as follows:

The intangible assets (incorporation expenses, patents, licences) are usually considered non value activities in order to determine the adjusted net assets of the company, with one exception: the research costs and the studies related to new products or to development and which are taken into account at the determination of the ANCC.

The operating tangible assets will be revalued considering their market value (the fair value). The **fair value** refers to the amount at which the asset could be bought or sold in a transaction between willing parties, with the price being determined objectively. The tangible assets that do not take part in the production process will not be taken into account when determining the ANCC.

The financial assets are valued at the entry, at the cost of purchase or at the value determined by the purchase agreement. In the case of the revaluation, the financial assets are registered at their fair value.

The inventories will be revalued at the lowest value between cost (of production or purchase) and the net realizable value. The net realizable value refers to estimated selling price that could be obtained during the normal course of activity, less the estimated costs for the completion of the goods, if necessary, and the estimated selling costs.

The certain debts are kept at the nominal value of the account receivable whereas the doubtful debts are revalued at the expected value of the accounts receivable.

The purpose of the corrected net assets is to eliminate the limits of the net assets and to give the company a value that is much closer to the economic reality. The balance sheet in historical costs will be replaced by the economic balance sheet, and the assets and liabilities will be brought at their current market value.

The correction of the balance sheet items is made in 3 ways, and thus 3 different values of the ANCC are obtained:

- depending on their probable negotiating value;
- depending on their utility value or use;
- depending on their liquidation value.

ANCC = Total revalued adjusted assets – Total debts

Or

ANCC = Shareholders' equity + / - Influences from the revaluation of asset items

5. Revalued net assets (ANR)

The value of the revalued net assets (ANR) is given by the corrected book values for inflation and takes into account the monetary erosion. A correct revaluation is based on a global inflation index and some individual indices of amortization. The same index can be used for both assets and amortizations.

Example:

SC „Carpați" SA (Joint Stock Company) has purchased tangible assets on 25 May 2009, for the sum of 28.560 lei, depreciable in 10 years. On 31.12.2011 its book value is 21.182 lei (28.560 – 31 months x 238 monthly amortization). The general index of prices between May 2009 - December 2011 was 2,57.

The restated value will be:

28.560 x 2,57 = 73.399,2

The accumulated amortization will have the following value:

73.399,2 : (10 x 12) x 31 = 18.961,46

The net restated value (less amortization) will be equal to:

73.399,2 – 18.961,46 = 54.437,74

The net book value has increased from 21.182 lei to 54.437,74 lei, which resulted in a more faithful picture of the value of the company's assets.

6. The permanent operating capital (CPNE)

The permanent operating capital (CPNE) shows the costs incurred by a newcomer on the market who wishes to have an identical company, with the same performances and results as the existing company. CPNE can be determined in relation with the assets (tangible and intangible assets +necessary working capital) or the liabilities (shareholders' equity + financial debts and long term debts), according to the following equations:

CPNE = Intangible assets + Tangible assets + NFR

CPNE = Shareholders' equity + Financial debts

The reconstitution value (Vrec) represents the difference between the replacement cost of assets (CPNE) and the total debts of the company, as indicated by the following equation:

Vrec = CPNE – Total debts

7. Net assets in liquidation (ANL)

Net assets in liquidation (ANL) are used for the companies in difficulty.

ANL is determined taking into account the ANC that is corrected as follows: the surplus value over the tangible and intangible asset items is added, the negative value of tangible and intangible asset items determined on the basis of the liquidation value is subtracted, the liquidation costs (change of use, operating costs during the liquidation period) are subtracted, the possible tax on the surplus value is also subtracted.

The result obtained after the liquidation of patrimony will be transmitted to the owners of the registered capital; the best situation is when the registration value of the assets exceeds that of debts.

There are three stages when a company goes into **liquidation**: the commencement of the liquidation, the continuation of the proceeding and the final winding up and dissolution of the company.

The commencement of liquidation consists of**:** the patrimony inventory and the elaboration of the balance sheet for the commencement of the liquidation. The inventory is meant to evaluate the assets and liabilities items. The valuation of assets is made at the realizable value of liquidation, based on the selling price that can result from the liquidation except for the estimated selling costs, and the valuation of debts is made at the settlement value of debts, which represents a nominal value that is not updated. The fictitious assets are not perceived as items of the assets evaluated prior to the liquidation.

The liquidation consists of the following**:**

a) the sale of assets at the liquidation value, that is lower than the market value (current);

b) the collection of debts is done according to the list drawn up by the liquidator;

c) the payment of debts is done in keeping with the order of prioritization determined in relation with the list of creditors;

d) the registration of liquidation expenses: penalties for the termination of contracts, lease paid in advance, compensation for dismissal, the liquidators' fees;

e) the settlement of the result from liquidation operations, which will be registered in a separate analytical account 121 „profit and loss";

f) the preparation of the final liquidation balance sheet, made following the completion of liquidation operations.

The final liquidation balance sheet can present one of the following situations:

- closing the liquidation process, covering the debts and getting the profit from liquidation;
- closing the liquidation process, covering the debts without getting a profit from liquidation;
- closing the liquidation process, without covering the debts and without getting a profit from liquidation.

After the approval of the final liquidation balance sheet, the remaining assets (available cash) are shared among the shareholders. Each shareholder will receive: initial capital contribution, increased/decreased by a share from the respective profit or loss on liquidation.

8. Substantial value

The substantial value is a functional value that derives from the balance sheet references and depends on the implications determined by the operating function of the company, on the basis of the operating assets.

The substantial value has 3 forms: gross substantial value, (VSB), reduced gross substantial value (VSBr) and net substantial value (VSN) [5].

The gross substantial value (VSB) refers to the balance sheet assets revalued on the presumption that the activity continues, to which is added the value of the assets used by the company without owning them, less the value of the assets which, even if recorded in the company's patrimony, are not used for different reasons (lease). The reduced gross substantial value (VSBr) is made up of the VSB from which the non-financial obligations have been deducted. The net substantial value (VSN) is identical to the adjusted net assets, being equal to the gross substantial value from which all debts are deducted.

The equation is the following one:

VSB =Corrected net assets + Assets obtained from hire or leasing – Assets borrowed/rented/ceded to third parties- Service charges and commissioning costs

VSBr =Gross substantial value – Interest-free debts – Advantages that go beyond the normal operating conditions

VSN =Gross substantial value – Total debts.

1) A company presents the following balance sheet:

BALANCE SHEET

ASSETS		LIABILITIES	
1) Intangible assets, of which:	800	1)Shareholders' equity, of which:	86.950
- incorporation expenses	600	- registered capital	80.000
- patents, licences	200	- legal reserves	4.000
2) Tangible assets	92.000	- retained earnings	2.950
3) Equity investments	3.500	2) Financial liabilities	17.500
1) Inventories	62.100	1) Payables	60.900
2) Debts	14.800	2) Dividend payable	2.550
3) Short-term financial investments	2.700	3) Short-term loans	20.800
4) Available cash	12.800		
TOTAL ASSETS	**188.700**	**TOTAL LIABILITIES**	**188.700**

Additional information:

a) the tangible assets also include a holiday house which is worth 4.500 lei; the fair value of operating tangible assets is of 95.950 lei;
b) the value of equity investments has depreciated by 800 lei, and the company has made value adjustments;
c) the inventories that will not be sold in the next 12 months (slow mover) are worth 1.100 lei, whereas the realizable net value of the other inventories is of 65.200 lei;
d) for 20% of debts, the likelihood of collection is 90%.

Requirements:

1) to draw up the financial statement;
1) to calculate the ANC;
2) to calculate the ANCC.

Solution

1) Before the drawing up of the financial statement according to the liquidation-exigibility criterion, the corrections are made in the balance sheet:

- the tangible assets will not be included in the ANCC calculation;
- the value of tangible assets will be of 95.950 lei, as those outside the operation (holiday houses) will not be included;
- the value of equity investments will be of 2.700 lei (3.500 – 800);
- the slow movers which amount to 1.100 lei will be recorded to tangible assets, and the difference of 61.000 lei will remain as floating assets, in keeping with the principle of prudence (the increase of stock value will not be recorded at 65.200 lei);
- the value of doubtful debts is the following: 14.800 x 20% x (100% – 90%) = 296 lei, therefore the revalued value of debts will be of 14.504 lei (14.800 – 296).

The financial statement is the following:

FINANCIAL STATEMENT

ASSETS		LIABILITIES	
PERMANENT NEEDS	100.550	PERMANENT CAPITAL	107.304
1) Intangible assets, out of which:	800	1)Shareholders' equity, out of	
- incorporation expenses	600	which:	89.804
- patents, licences	200	- registered capital	80.000
2) Tangible assets including slow movers		- legal reserves	4.000
3) Equity investments	97.050	- retained earning	2.950
	2.700	- revaluation reserve	2.854
		2) Financial debts	17.500
TEMPORARY NEEDS	91.004	CURRENT DEBTS	84.250
1) Inventories	61.000	1) Payables	60.900
2) Debts	14.504	2) Dividend payable	2.550
3) Short term investments	2.700	3) Short term loans	20.800
4) Liquid assets	12.800		
TOTAL ASSETS	**191.554**	**TOTAL LIABILITIES**	**191.554**

2) ANC is calculated from the balance sheet without the corrections from this balance sheet and without taking into consideration the operating and non operating assets:

ANC = Total assets – Total debts

ANC = 188.700 – 17.500 – 84.250 = 86.950 lei.

3) **ANCC = Total revalued adjusted assets – Total debts**

ANCC = 191.554 – 17.500 – 84.250 = 89.804 lei, that is the previous value of the shareholders' equity to which the revaluation reserve is added.

9. Conclusions

If we take into consideration the shareholders' equity, the book value of the company before the balance restatement was of 86.950 lei. The market value of the company is given by the adjusted net assets which represent 89.804 lei. It should be noted that the price of the company's sale is rarely identical with the adjusted net assets. In the selling context of a company, the international and national context in which the sale and purchase action takes place is very important: it is a period of economic boom, stagnation, decline, market share, market perspectives, geographical position, and staff development.

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