

## CONSIDERATIONS REGARDING THE ENTERPRISE VALUE'S ANALYSIS BASED ON PATRIMONIAL WEALTH AND STOCK RETURN

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**Abstract:** *In the current academic and professional setting, there are further numerous concerns regarding the determination of a real and fair enterprise value, especially when considering the current socio-economic context dominated by speed, complexity and uncertainty, characteristics resulting in a permanent change of context. Both literature and specialty practice offer numerous methodologies, standards and specific indicators to quantify the enterprise value based on certain considerations or assumptions, which makes the methods and techniques used to meet their demands and thus provide an enterprise's value from their perspective wherefrom controversy arises over which method is better or most accurately reflects reality. This paper, developed by academics and practitioners, does not aim to establish criteria to underline the better method, nor to realize an inventory of these methods, but it aims to explain, in a structured way, the possibilities for establishing the enterprise's value based on its patrimonial wealth assessment, its market value through stock capitalization respectively. Moreover, the paper focuses on the analysis of the net asset value calculated at the enterprise level, as an expression of patrimonial value (book value) and stock return as an expression of the performance market validation and attractiveness to investors (market value). Finally, it weights the values obtained through both angles and expresses the relationship that must exist between them.*

**Key words:** *patrimonial wealth, net asset value (book value), market value, market capitalization, enterprise value index*

### INTRODUCTION

Net assets value (NAV) and book value per share (Vmc) represent shareholders' wealth given by the intrinsic value of equity allocated to the business's assets. This evaluation angle is based on the historical cost of an enterprise's assets, without taking into account their financial potential. In this context, through financial potential we understand the ability of these assets to generate future financial results as a result of their use in the enterprise's activities. Singularly, the higher the asset value expressed through NAV or Vmc, the more important the wealth owned by shareholders. This "type of wealth" is a result of "a within the enterprise" perspective. However, a high NAV or Vmc is not a guarantee that the market value, as an expression of the second "type of wealth", result of "an outside the enterprise" perspective, will be just as great. This latter type of wealth reflects in a transparent way, the enterprise's wealth and represent inclusively the perception of others regarding the attractiveness of the enterprise in terms of its ability to generate value. A classic expression of this type of wealth is the market share stock (Cb) or market capitalization (MCAP). Market capitalization is the market value of an enterprise given by the total value of the issued shares at a specific period of time. Thus, NAV and MCAP express the same shareholders' wealth, but in two different angles, first in terms of historical cost of the enterprise's assets, and the second in terms of the enterprise's attractiveness to create value, that is at least based on the assets' ability to generate financial results.

In this respect, for listed companies, market capitalization is considered while for the unlisted ones, net assets value.

In the specialized literature and practice there are other possibilities for determining the value of businesses, both listed and especially unlisted, widely used in practice through

the present value of different financial results types that enterprise's business could generate in the future.

## 1. ANALYSIS OF NET ASSET VALUE

### Objectives:

- determining book value of the enterprise;
- assessment of the wealth accumulated by shareholders and its dynamics through the value of assets owned by the enterprise.

### Definition

Net asset value measures the net wealth of the shareholders at a certain time, the asset encumbered by debt. It is also called net statement. NAV is determined as the difference between the real asset (RA) and total debt incurred by the company (TD).

### Formula

$$NAV = RA - TD$$

The real asset's size comes from eliminating from the balance sheet's total assets (TA) the fictitious assets (FA) so that real asset size corresponds to the size of the total assets of the financial balance sheet.

The financial balance sheet is a tool characterized by the following aspects:

- a. is based on the balance sheet;
- b. satisfies the criteria of assets and liabilities hierarchy;
- c. presents, as well as the balance sheet, in a realistic manner the property and debt rights (economic means or funding needs) as well as debts and liabilities (funding sources);
- d. realized wishes b and c by removing fictitious assets (including updating through a reevaluation of business assets) and organizing assets and liabilities (fixed assets and equity, and current assets and current liabilities).

$$RA = TA - FA$$

We consider that the main objective of an enterprise's activity is increasing shareholder's wealth through increasing NAV.

### Interpretations

Static analysis:

a) If  $NAV > 0$ , then:

- it records a partial or full performance fulfillment of the enterprise's primary objective - maximizing the value of equity and therefor of its net asset;
- it is a consequence of the capitalization of part of the net profit or accumulations' reinvestment.

b) If  $NAV < 0$ , then:

- the debts incurred by the enterprise outrun its net assets;
- it is a result of losses from previous year over other elements of equity;
- records a pre bankruptcy state.

Dynamic analysis:

a) NAV presents an increasing trend ( $I_{NAV} > 1$ ) - increase (enrichment) of shareholders' wealth - which is due to the change of the total assets that is financed by equity and liabilities, but the growth rhythm of equity outruns the growth rhythm of liabilities.

$$I_{TA} > 1; I_{TD} \leq 1, \text{ increase of total assets solely on equity;}$$

$I_{TD} > 1$  but  $I_{TA} \geq I_{TD}$ , increase of total assets financed by both equity and long term debt;

$I_{TA} = 1; I_{TD} < 1$ , decrease of total debt while maintaining constant total assets;

$I_{TA} < 1; I_{TD} < 1$ , but  $I_{TA} > I_{TD}$ , liabilities decrease at a rate greater than total assets.

b) NAV shows a downward trend ( $I_{NAV} < 1$ ) - decrease (depletion) of the shareholders' wealth - which is due to changes in total assets, but the dynamics of equity is outrun by liabilities' dynamics.

$$I_{TD} > I_{TA}$$

Based on net asset value, by comparing it to the number of shares (Ns) we obtain the book value of a share (Vmc), ie the asset value of a share.

$$Vmc = \frac{NAV}{Ns}$$

## 2. MARKET CAPITALIZATION AND STOCK RETURN ANALYSIS

### Objectives:

- assessment of shareholders' accumulated wealth, transparently reflected by market value;
- assessing the profitability of the enterprise through investors' remuneration for their investments in the enterprise's shares.

### 2. 1. MARKET CAPITALIZATION

#### Definition

Market capitalization (MCAP) measures the wealth of shareholders at a certain time, in a transparent and continuous way, through daily listings of the stock exchange of an enterprise's in a financial markets rigorously organized.

It is determined by the number of shares (Ns) and their stock list (Cb).

#### Formula

$$MCAP = Ns \times Cb$$

In terms of market value, the enterprise's main objective can be achieved by increasing the market value of the action (the stock of an action), ie market capitalization.

#### Interpretations

Market capitalization offers a number of advantages in terms of establishing enterprise value:

- transparency - anyone can determine it, the calculus data being public;
- continuity - it can be determined at any time thus being volatile;
- has a simple calculation methodology;
- allow comparability between enterprises and a rapid grounding for the investment decision.

A disadvantage of this method is generated by the stock exchange. We must admit that the share quotation is not only generated by the financial performance reported by an enterprise or by the growth expectations of investors following the undertaking of new business, but is also influenced by a number of exogenous factors beyond the control power of the enterprise such as sector attractiveness, the development degree of the financial markets or economic conjuncture, thus being the result of speculative actions. We agree that the enterprise value is in constant change and capitalization allows highlighting this dynamic but sometimes due to contextual or psychological factors, the enterprise's value may be vitiated.

## 2.2. POTENTIAL YIELD ANALYSIS

Potential yield seeks shareholders' compensation from the net income.

### A. Earnings per share (EPS)

#### Definition

The indicator shows the annual net income per share ( $N_i$ ).

#### Formula

$$EPS = \frac{N_i}{N_s}$$

#### Interpretations

The more net income per share, the shareholder wealth increases.

The indicators' increasing trend highlights an increasing effectiveness and efficiency from the shareholders' point of view.

### B. Net income capitalization rate ( $R_{cp}$ )

#### Definition

The indicator shows how much net income generates a unit of capital invested in a share or the number of years required to recover the invested capital if the full net income would be distributed as dividends. It is another way of calculating the financial return, seen from the perspective of investors.

#### Formula

$$R_{cp} = \frac{N_i}{C_b}$$

#### Interpretations

The indicators' increasing trend underlines a performance increase seen in terms of shareholders (or potential investors, if the indicator is used in substantiating the investment decision).

### C. Market capitalization coefficient (PER)

#### Definition

The indicator measures the number of times investors are required to purchase the amount of net income per share. From another perspective, it is the price that investors are willing to pay for a unit of net income per share.

#### Formula

$$PER = \frac{C_b}{N_i}$$

#### Interpretations

The decreasing trend of the indicator reveals a decreased of investor's confidence in the enterprise, but this underevaluation may increase purchasing attractiveness of the enterprise's shares.

The increasing trend of the indicator highlights a confidence in a potentially positive future for the enterprise's business, implying an overvaluation of shares which may generate a decrease of the purchasing attractiveness of the enterprise's shares.

Until the current financial and economic crisis, high level exchange studies indicated that PER was higher than the historical one and presented a growth trend, thus underlining the investor's confidence regarding listed enterprise's potential investors to generate higher profits in the future.

## 2.3. EFFECTIVE YIELD ANALYSIS

This type of yield seeks an effective remuneration of shareholders through dividends.

**A. Dividend distribution coefficient (DDc)**

**Definition**

The indicator shows how much of the net profit is distributed effectively to remunerate shareholders.

**Formula**

$$DDc = \frac{Div}{Pn} \times 100$$

**Interpretations**

The indicator's level and trend heavily dependent on the enterprise's financial policy on the net profit allocation and on the shareholders' strength (concentration). The higher the indicator, the more important part of the net profit will be directed to shareholders' remuneration (increase of their private wealth), while the enterprise is deprived of self-financing resources.

**B. Net dividend per share (DPS)**

**Definition**

The indicator shows the level of net dividend (ND) per effective share. Basically, it underlines the net remuneration of a share.

**Formula**

$$DPS = \frac{ND}{Ns}$$

**Interpretations**

The higher the indicator, the more the increase the real wealth of shareholders.

**C. Dividend capitalization rate**

**Definition**

The indicator shows how much net dividend is generated by a monetary unit invested in a share. It reflects dividend returns that a shareholder gains by investing its capital in shares, being an expression of placement's efficiency. The indicator also shows the number of years needed to effectively recover the amount that the shareholder invested in the purchase of a shares.

**Formula**

$$Rcdiv = \frac{DPS}{Cb}$$

**Interpretations**

A growing trend reflects an efficiency increase from the shareholders' point of view.

The indicator's interpretation must be correlated with the dynamic of the net income per share and of the net income capitalization rate.

**D. Total shareholders' return (TSR)**

**Definition**

The indicator is intended to measure the shareholders' earnings from both dividends' distribution and exchange rate dynamic.

From our perspective, the most important component is the variation of a share's value which synthesizes all management decisions and captures the enterprise's industry attractiveness.

The relative size of the indicator is the total return rate of shareholders (TSR).

**Formula**

$$TSR = DPS + (Cbsf - Cbi)$$

or

$$Rrta = \frac{TSR}{Cbi} \times 100$$

Where:

TSR - total gain of shareholders;

DPS - dividend per share;

Cbsf – on ending stock quote;

CBI – on opening stock quote.

### Interpretations

Through its construction and content, the analysis of the indicator's level is undertaken by comparing with either its planned level or with the indicator's levels obtained by enterprises in the same sector of activity or across sectors.

The comparison with the planned level involves tracking the shareholders' investment evolution according to the shares' attractiveness that justified the initial purchase.

Comparisons with enterprises in other sectors are needed in order to highlight the extent to which the investment decision taken by the shareholder was the best.

The indicators' trend should be increasing, highlighting the increase of shareholder's total earnings.

## 3. COMPARATIVE ANALYSIS OF BOOK VALUE / MARKET VALUE

### Objectives:

- pointing out specific ways of measuring the spread between the net asset value and the market value of an enterprise;
- explaining the possible situations that may occur between the two values.

Highlighting the gap between book value and the market value is achieved by comparing the two values. The comparison is based on a dual perspective of enterprise value assessment, on the one hand based on asset value (NAV), given the intrinsic cost of goods and rights of the enterprise, and on the other hand based on the market value (MV), given by a market validation of the enterprise's performance through market capitalization.

### Formula

$\Delta V = VR - VP$  - absolute deviation ;

$Iv = \frac{VR}{VP} \times 100$  - value index;

$\Delta Iv = \frac{\Delta V}{VP} \times 100$  - relative deviation.

### Interpretations

We can distinguish the following cases:

a) If  $VR = VP$ , then  $\Delta V = 0$ ;  $Iv = 100\%$ ;  $\Delta Iv = 0\%$  :

- market value equals the book value, the intrinsic value of the enterprise's assets is equal to the amount generated by their use or, in other words, the enterprise, through its invested capital and guided by a particular strategic option, yields a market value equal to the initial value of capital invested, without providing an increase of their value;
- no increase of shareholders' wealth can be ensured;
- necessary strategic directions are needed for an efficient use of assets (rethinking the business) or a more effective use even by leaving the enterprise's proposed business.

b) If  $VR > VP$ , then  $\Delta V > 0$ ;  $Iv > 100\%$ ;  $\Delta Iv > 0\%$  :

- the market value is higher than the book value, so the amount of capital invested exceeds the initial value (the moment of assets allocation);
  - an increase of shareholders' wealth;
  - a favorable situation for the enterprise;
  - usually, strategic actions are required (a continuation of business at the same minimum efficiency requirements).
- c) If  $VR < VP$ , then  $\Delta V < 0$ ;  $Iv < 100\%$ ;  $\Delta Iv < 0\%$ :
- market value is lower than the asset value, in their use, assets do not emit the least amount of value, ie a decrease in the value of invested capital is observed;
  - shareholders impoverishment and destruction of their value;
  - unfavorable situation for the enterprise;
  - a more efficient use of capital is required by leaving the business and recovering the maximum possible value.

**Forms of expression:**

Absolute deviation:

$$\Delta V = CB - ANC$$

Value index:

$$Iv = \frac{CB}{ANC} \times 100$$

Relative deviation:

$$\Delta Iv = \frac{\Delta V}{ANC} \times 100$$

## CONCLUSIONS

- Net assets value and the accounting value of a share express the heritage value of an enterprise.
- The net asset value of an enterprise is based on the intrinsic value of capital allocated to the business assets.
- The net asset value does not take into account the enterprise's assets ability to generate future financial results.
- Market value is easiest and fastest determined on market capitalization.
- Market capitalization is in constant change.
- Market capitalization reflects the current and future financial performance of an enterprise, but sometimes it is vitiated by the action of incidental or psychological factors.
- Stock performance analysis can be considered complementary for listed companies.
- Between the enterprise's asset value and yield, significant size differences might occur, emphasized by the index value.
- For an enterprise, it is both important to hold assets and to ensure that the results generated by their use are higher. Following the rules of economic efficiency, it is required to gain high financial results for a small level of capital assets allocated. In other words, a higher market value than property value is required, thus, an index value greater than one.

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