The ways of the value assessment the enterprises and the micro-enterprises

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Abstract

The paper concerns the assessment of the value of the enterprises, including the micro-enterprises. There are not so many publications regarding the micro-enterprises in comparison to the matters of the assessment of the big enterprises. Whereas, the importance of the micro-enterprises in the domestic, regional and global economy is crucial. In this paper, it is discussed the core of the assessment of the value of the enterprises and its aim and also the characteristics of the assessment of the market value of the micro-enterprises including its genesis. Furthermore, there are also alleged the functions of the assessment of the market value of the micro-enterprises, and also its methods applied in Germany and in the USA. The paper also presents the basic group of methods discussed in the Polish literature. It is presented the detailed review of the chosen ways of the assessment of the values of the enterprises and micro-enterprises including the demonstration of the particular quantitative tools (mathematical formula) used in the assessment practice. There are among others the balance transaction method, and also different methods: profitable, market, cost, property and mixed. In the final conclusion, there are included the motions concerning the assessment of the market value of the micro-enterprises due to the specific role of their functioning in the economy.

Keywords: enterprise, micro-enterprise, assessment, the ways of the assessment of the value of the enterprise.

Introduction

The aim of this paper is the presentation of the ways of the assessment of the value of the enterprises, including the micro-enterprise. In the specialized Polish literature, there are not many publications devoted to this issue, in contrast to the problem of the assessment of big enterprises. That is why it is justified to bring the issue in the literature of the subject.

The function of the micro-enterprise, both in the Polish but also European, and global economy cannot be underestimated. On the one hand, they are the main driving force of the innovative process within the economy. On the other hand, they are hold the greatest risk during different changes in this environment.

Material and methods

(1) The stuff of the assessment of the values of the enterprises.

The assessment of the market value of the enterprise is expressed in the economic and financial categories. The aim of it is also the management of the enterprise which leads to the increase of the values of the current flow of money of its owners and staff.
The level of satisfaction of the entrepreneurs and shareholders is however depended among other on the pace of the growth of their wealth, and this is then associated with the assessment of the enterprise.

Investment advisors and experienced market professionals have at their disposal different scientific methods of the assessment of the market value of the enterprise. These methods are depended on:

- the aim of the assessment,
- the character of the assessed enterprise.

These are among others the following methods:

- Profitable,
- Market-based,
- Cost,
- Material,
- Mixed.

These methods determine the real and the reliable range of the value of the assessed enterprise.

Every description, assessment, the evaluation of the value handles the different measurements, calculations, and indicators. The precise assessment can be presented after the fulfillment of the whole process of this operation.

According to S. Nahotko: ‘the assessment of the value of the enterprise is the process in which analysis and prediction methods are used, leading to the arrangements of its value expressed in the economical categories as a base of negotiations, tenders with the investors, and such like’ (Nahotko, 1998, 78).

According to such definition of the assessment of the values of enterprises, it can be distinguished the two following types of the assessment:

- balance,
- based on the values of conducted transactions.

The first type of the assessment -balance- should prevent from distorting:

- of the level of results of the functioning of the particular subject,
- the particular elements of the wealth of the company under the influence of the dynamic change of the purchasing power of the money.

What is more, the appropriate balance assessment has to:

- indicate the state of the assets and the liabilities of the particular enterprise,
- assess the results of its activity,
- determine ‘the market value’ of her/his assets (Nahotko, 1998, 78).

This kind of assessment provides the high quality of the enterprise management. It is used in compiling the financial balance sheet account. Furthermore, it is the important element of the second type of the assessment, that is the assessment based on the values of conducted transactions.

The assessment based on the values of conducted transactions requires:

- the exact defining of the aim of the assessment,
- the recognition of the condition of the functioning of the enterprises,
- the specialised usage of econometrical, financial and prognostic methods and also
- combining experience and imagination (Nahotko, 1998, 79).

The great importance during the transaction-based assessment of its enterprise performs the external environment, that is the economic situation, market balance, the current interest rate and the tax rules (Nahotko, 1998, 79). The result of the transaction-based assessment is not the transaction price but the range of negotiations concerning the assets and the liabilities of the enterprise during the transactions.

(2) The features of the assessment of the market-based value of the micro-enterprise.

The genesis of the establishing of the value of the entity is:

- the change of the owner of the micro-enterprise (purchase-sale, donations, legacy, division of the assets during the divorce, fusions, seizure, stock issue),
- the restructuring of the micro-enterprise,
- the balance upgrade of the values of the components of the assets and the liabilities of the micro-enterprise,
• the assessment of the credit capacity of the enterprise and the source of the foreign capital (the assessment of the resources securing the credit) and also
• the arrangement of the basics of taxation, insurance and compensation (Nahotko, 1998, 79).

The detailed aims of the assessment of the enterprise are formalized in the appropriate legal acts.

On the assessment of the market value of the enterprise the great importance has the level of the Gross Domestic Product per capita and also the productivity and the establishment of the company value (Copeland, 2007, 9, 19).

The assessment of the market value of the micro-enterprise fulfills the following functions:
• advisory and decision made
• justifying the reasoning during the negotiations
• interceding the mediation and also
• information in the business environment.

The assessment of the market value of micro-enterprise conducted for the needs of the management: negotiations and the tenders with the investors-takes place multidimensional depending on the experimental approach.

The special attention should be paid on the theory and the practice in the field of the assessment of the market value of the micro-enterprise applied in the countries with the highly developed market economy. In such countries, the following methods are widely applied:
• profitable,
• mixed.

For instance:
In Germany, there are 4 groups of ways of the assessment of the market value:
• the assessment of the component assets based on the restoration or closing-down value
• the profitable assessment based on discounted future income terms (the profit, Cash, flow),
• the assessment regarding the value of reputation (goodwill),
• the assessment based on the average value (German and Swiss) (Nahotko, 1998, 114).

In America, thus, complies the 3 approaches:
• the profitable approach in accordance with the rule, that the enterprise has such value that is its profit during many years (during n years),
• the assets approach according to which, the value of the micro-enterprise is its ‘touchable’ assets and also
• the market approach based on the purchase-sale market and the comparison between different offers and transactions (Kisielnicki, 1992, 84).

In Polish literature there are basically represented three basic group of methods of the assessment based on:
• the assessment of the asset
• the assessment of the abilities of generating the financial surpluses
• the assessment and the asset, and also of the abilities of generating the financial surpluses but also
• the market approach (the stock of the enterprise).

In practice, the mainly, isochronally a few ways of the assessment are applied. In the case of over 20% the variance of its results, the average value, is applied (Ostaszewski, 1993).

Results and discussion

The review of the chosen ways of the assessment of the value of the enterprise and the micro-enterprise.

(1) The simplest way of the assessment of the value of the enterprise is the way based on the balance-sheet (Kisielnicki, 1992, 54), and its result is asset value based on the historical cost, however without regarding the influence of inflation, and also without the value of brain capital, which is not included in the balance-sheet. This is why the asset way does not include intangible assets such as: the competences of the employees, their values, innovativeness, or the organization structure of the company.
There are also not taken into consideration: the market opinions about the company among the clients, suppliers, or the brand name or the brands. The typical for the asset way is:

- the method of net book value (BV-book value method) also called the method of the values of the net assets down-grading of the accounted value of the assets of the borrowed capital (all forward commitment),
- the method of corrected value of the net assets, as a refinement of the previous one mentioned above, based on the additional determination of the market value of the company, applying the under mentioned formula:

\[ W_P = (A + K_A) - (P_O + K_{PO}) \]

where:
- \( W_P \) – the value of the company,
- \( A \) – the accountant value of the assets,
- \( K_A \) – the correction of the value of accountant assets,
- \( P_O \) – the accountant value of foreign liabilities,
- \( K_{PO} \) – the correction of the values of foreign liabilities,
- the replacement method - evaluating the outlay necessary for the replacement of the assessed health,
- the liquidity method, that is realisable, in which from the sales value of the asset, the all financial obligations are deducted in case of the shutdown within the costs of the liquidity, that is the closing down value of the micro-enterprise,

(2) For the most universal basis of the assessment is regarded the income in the diagnostic and prognostic aspect.

For the profitable way, the most common are:

- the method of cash flow for all financial parties (FCFF-Free Cash Flow) using the general formula:

\[ EV = \sum_{t=1}^{t=n} \frac{FCF_t}{(1+WACC)^t} + \frac{RVF_n}{(1+WACC)^n} + NOA \]

where:
- \( EV \) – the value of the firm (the value for all financial parties) – Enterprise Value,
- \( NOA \) – non-operational assets-not associated with the activity of the enterprise, the financial asset,
- \( FCF_t \) – the cash flow from the operational activity, generated by the enterprise during ‘t’ term,
- \( WACC \) – Weighted Average Cost of Capital,
- \( RVF_n \) – the residual value based on the cash flow from the operational activity,
- the method of financial cash flow to shareholders/owners (FCFE-Free Cash Flow to Equity) including in the flows: the financial flows from the owners, the inflows and the outflows from the creditors,
- the method of adjusted present value (APY – Adjusted Present Value) using the general formula:

\[ EV = \sum_{t=1}^{t=n} \frac{TF_t}{(1+k_{EUL})^t} + \frac{RV_{TF}}{(1+k_{EUL})^n} + NOA \]

flow from the operational activity,
- \( TS_t \) – the value of the tax shield in the year ‘t’. 

(3) Apart from asset and income ways, there are also the comparative ways of the assessment, also called the indicator method or the multiplier method conveying the comparing the values of the assessed firms to the previously assessed ones with the usage of the information about the multipliers of changeable market value.

On the one hand the comparative ways are
simple, quick and they regard the market situation. On the other hand, there comes up the difficulty with the matching of the comparable micro-enterprise due to limited access to them.

(4) In the result of the elimination of the drawbacks and the combining of the asset and profitable ways of the assessment, there has been developed the mixed ways of the assessments based on:

- average value:
  - Berliner according to the formula:
    \[ W = \frac{M + D}{2} \]
    where:
    \( W \) – the value of the enterprise,
    \( M \) – the value of the enterprise assessed with the usage of wealthy method,
    \( D \) – the value of the enterprise assessed with the usage of profitable method,

- Swiss method according to the formula:
  \[ W = \frac{M + 2D}{3} \]
  where:
  \( W \) – the value of the enterprises,
  \( M \) – the value of the enterprise assessed with the usage of wealthy method,
  \( D \) – the value of the enterprise assessed with the usage of profitable method

- Reverse Swizz assigning more importance to wealth assessment
  - the value of the reputation, where the financial surplus of the firm is expressed by the following formula:
    \[ CF = M \cdot s + R \cdot s \]
    where:
    \( CF \) – the financial surplus,
    \( M \) – the value of the assets of the enterprise,
    \( R \) – the value of the reputation,
    \( s \) – the rate of the pace of increasing the value.

Furthermore:

- the Anglo-Saxon method (UEC) using the following formula:
  \[ W = M + \left( 1 - \frac{1}{(1 + r)^n} \right) \cdot (D - M) \]
  where:
  \( W \) – the value of the enterprise,
  \( M \) – the value of the assets of the enterprise,
  \( D \) – the profitable value of the enterprise (determine from the wealthy method, for example the DCF model),
  \( r \) – the discount rate,
  \( n \) – the duration of the time of charging the profits coming from the reputation,

- Stuttgart’s assessment using the following formula:
  \[ W = M + \left( 1 - \frac{1}{r \cdot m} \right) \cdot (D - M) \]
  where:
  \( m \) – the duration of the period of the amortisation of the value of reputation,

- the perpetual decrease in reputation calculating the value of the micro-enterprise according to the formula:
  \[ W = M + \left( 1 - \frac{5 \cdot r}{1 + 5 \cdot r} \right) \cdot (D - M) \]
  where the indications are the same as in the case of the Anglo-Saxon,

- the year purchase using the formula:
  \[ W = M + n \cdot r \cdot (D - M) \]
  where the indications are as formerly,

- base on the pace rate of multiplying the value calculating from the formula:
  \[ S = \frac{W_1 - W_0}{W_0} = \frac{\Delta W}{W_0} \]
  where:
  \( S \) – the indicator of the pace of multiplying the wealth,
  \( W_0 \) – the value of the wealth of the firm at the beginning of the reporting period,
  \( W_1 \) – the value of the wealth of the firm at the end of the reporting period,
  \( \Delta W \) – the increase of the wealth of the firm in the reporting period,
  then the value of the wealth of firm after ‘n’ years amounts to:
  \[ W_n = W_0 \cdot e^{sn} \]
  where:
  \( W_n \) – the value of the wealth of the firm after ‘n’ years,
  and the current value of the firm is calculated
according to the formula: 
\[ W = W_n \cdot e^{-rn} \]

where:
- \( W \) – the current value of the firm after \( 'n' \) period.

(5) Furthermore, there are also the unconventional ways (f. ex: the method of option-real option) regarding, during the assessment of the value of (micro) enterprise, also their investment possibilities (Wiliamowska, 2005).

Conclusions

Of regard for the specific function of the functioning of the micro-enterprise, the following aspects during the assessment of the market-value, should be taken under consideration:

- the usage of the manufactured products and services for her/his needs and acquiring the goods in wholesale price,
- including for example the exploitation of the car, delegations and such like, to the tax-deductible expenses,
- including for example the repair costs, renovations, maintaining of the telephone, family expenses and such like to the cost of the firm,
- withdrawing to the family members different forms of salary and so on.

It is not enough to estimate the value of the micro-enterprise using the wealthy way because, generally, they are not in big wealth. It is also difficult to estimate the future flow with the usage of profitable way. Since, with the low income, a lot of micro-enterprise run further their activity. That is why the most pertinent for the assessment of the value of the micro-enterprise seems to be the mixed ways. However, the value of the reputation of a small firm should be assessed in detail due to possibility of the great impact of different factors to the ultimate value of the whole company.

Also, the unconventional ways–very specific ones, so like the micro-enterprises–may create the basic group of ways of the assessment of the market value of micro-enterprises. Applying the real options methods gives the possibility of considering the small firm as the investment area and then the assessment of its market value can be adequate and reliable.

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