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### Methodological Basis of Business Value Estimation

Eleonora Y. Tereshchenko<sup>1</sup>, Inga A. Koryagina<sup>2</sup>, Marina N. Rudenko<sup>3</sup>, Zhanna A. Kevorkova<sup>4</sup>  
and Viacheslav A. Yelistratov<sup>5</sup>

<sup>1</sup>V.I. Vernadsky Crimean Federal University, Simferopol, Russia. Email: [ellakopp@rambler.ru](mailto:ellakopp@rambler.ru)

<sup>2</sup>Plekhanov Russian University of Economics, Moscow, Russia

<sup>3</sup>Perm State National Research University, Perm, Russia

<sup>4</sup>Financial University under the Government of the Russian Federation, Moscow, Russia

<sup>5</sup>Kremenchuk Mykhailo Ostrobradskyi National University, Kremenchuk, Ukraine

#### ABSTRACT

Economic structure valuation is the main component in the organization of infrastructure, which is necessary for further economic reforms in our country. Today, valuation has taken a noticeable place in the market economy. Over the past ten years, valuation results of various kinds of objects have been the kernel to the majority decisions made in the private and the public sectors. Business valuation has become an indispensable tool in the arsenal of the modern Russian businessman, financier, and manager. In the conditions of the market economy, it is difficult for either the common citizen or entrepreneur, as well as for the government officials and policy makers to do without a common clear understanding of the valuation activity. A successful business is based on a clear and concrete understanding of all the processes, activities, analysis of strengths and weaknesses of the enterprise and the continuous monitoring of its market position in the increasingly competitive environment. In order to determine the value of the business properly, this article attempts to discuss the methodological basis of modeling financial assets valuation. The main types of approaches to business valuation - profit, comparative, and cost are also discussed.

**Keywords:** Valuation, assessment methods, market, share, business valuation, approach, investment, competition.

#### 1. INTRODUCTION

The unique character of the current economic policy of the Russian Federation lies in the necessity and importance of evaluating its business enterprises. The main purpose is the organization cost management

for investment purposes, attraction of capital and credit resources, and hedging risks in the course of business or in production cycle.

The difficulty of the task is primarily connected with the ambiguity of experts' opinions and on the methodology for determining the market value of an enterprise, but also with the fact that the tasks that need to be addressed are unique and extremely varied.

Administration of a business focusses on a permanent increase in the value of the enterprise (value of the property) as the changes in the price over a given period is an indicator of the efficiency of its economic activity. The value of a business also links almost all available information related to its functioning.

Considering and taking certain administrative decision, the head of the enterprise and his or her subordinates should compare their effects and the performance of the organization, the final criterion of which is its estimated value.

Any taken decision is linked to a number of other decisions taken previously. For example, financing solutions are linked to the company's dividend policy; decisions to raise debt capital will have effect on the relationships with suppliers, customers, and so on.

In the market economy there is an issue of equitable distribution of benefits among the players. One of the ways to solve this problem is an adequate cost estimation of business enterprises and identification of factors that affect their overall price in order to adopt new management solutions leading to the achievement of the goal - increasing the cost of businesses and, with the help of it, raising the wealth of the society.

However, neither economic science, nor practical experience can give a complete answer concerning the economic evaluation of businesses. There is no systematic model that would take into account all social and economic to be used for the effective management.

## **2. MATERIALS AND METHODS**

Theoretical and methodological basis consists of the sources of information for writing this article, publications and reports, modern scientific approaches to the study of methodology of value estimation of businesses and property in the Russian Federation, as well as works by foreign and domestic authors on business value estimation.

The research methodology is based on the dialectical method, system and strategic approaches to the analyzed objects. Scientific provisions, conclusions and recommendations made in the article are founded on the use of combined methods of historical and logical analysis, comparison and synthesis, induction and deduction, economic-statistical method and expert assessments.

The information base of research is comprised of the laws of the Russian Federation, the official publication of state statistics, works by I.A. Egerev and S. Mordashov, thematic collections and directories, information published in scientific journals and periodicals, Internet resources.

The focus of this article is to develop the business evaluation methodology, taking into account all the production and social aspects.

### **3. DISCUSSION**

Today there are many definitions of a business. One commonly used definition states that a business is an economic category, which makes a profit; an increase in the value of a business increases its profits.

According to another definition, a business can be considered as the total value of its property. This concept includes not only the factors of production, which make up the property, but also for all the economic relations that regulate the property rights, consequently, the income received during the manufacturing process.

Such dual perception of a business determines defines two approaches to its value estimation.

The first approach considers an enterprise to be a property complex, the price of which is primarily made up of the cost of its creation.

The second approach determines the ownership cost, including the technology, as well as competitive advantages and assets.

The formation of the financial, real estate, and stock markets contributed to the emergence of a new service - the business value estimation, i.e. the evaluation of the actual market cost of capital.

The results of business valuation estimation are used in preparation of the enterprise for its participation in competition and survival on the basis of real representation of its existing capacity as well as the selection of the strategic plan.

The results of the estimation are obtained through various approaches, each of which confirms the benefits of increased market value and, consequently, the expected organization's work efficiency.

The most productive approach involves using all available arsenal of assessment tools methods to find out not only the cost of formation and establishment of the organization, but also its income in the future and in comparison with the data for identical businesses.

Privatization, improved market, insurance systems, the stock market, the transition of commercial banks to the system of commercial mortgage lending contributes to the need for business value estimation.

Article 8 of the Federal Law "On valuation practice in the Russian Federation" lists the cases mandatory assessment.

Activities of business value estimation may become a constantly executed function. This function will be engaged in order to determine the impact of innovation and investment activity on the enterprise's market value (stock value), as well as on the valuation of enterprises which need to be sold or in the calculation insurances for steadily operating enterprise. Business valuation has specific terminology, which i.e. regulated by the Russian standards - "Unified system of property valuation. Terms and definitions "National Standard GOST R 51195.0.02-98.

In accordance with evaluation standards approved by the Russian Government No. 519 on July 6, 2001 "On approval of the evaluation standards", certain types of cost that may vary depending on the business valuation purposes.

The cost of a business is the price of existing property complex of the operating structures including intangible assets.

Business value estimation is the process of identifying by an expert-appraiser the cost of the object for a particular purpose, the result of which is a science-based opinion on the material cost of the estimated object on the date of evaluation. It is a focused streamlined process of determining the monetary cost, taking into account the influencing factors at any given time in a particular market.

The basic principles that are typical to the process of enterprise value estimation:

- the enterprise (business) value estimation is a process of during which an expert-appraiser must perform a number of operations, the sequence and the essence of which depend on the purpose of the assessment, characteristics of the object and the selected methods;
- the estimation process is structured. All actions take place in a prescribed and assigned order;
- estimation is an action-oriented process. The appraiser should always be guided by the particular and specific purpose. However, the cost of the business depends on the final purpose of the estimation, as well as on the overall presentation of object characteristics and the existing property.

The volume and structure of the main types of property has an effect on the direction of the economy and business activity that, in their turn, have an impact on management decisions.

When considering methodological foundations for business value estimation enterprise, the fundamental concepts developed by A. Damodaran, I. Yegerev, T. Copeland, S. Mordashev, K. Walsch should be noted.

A. Damodaran's approach is organized around the method of discounted cash flows used in property cost management of enterprise.

The basis of this approach rests on four factors that affect the value of the business:

- cash flow generated by the assets;
- the expected increase rate in cash flows due to the income (profit) reinvestment or change in the return on the invested capital;
- improving the duration of the maximum cash flow growth period;
- fluctuations in the value of property due to fluctuations in the operational risk of investments capital, changes in the proportions of debt funding or changes in the conditions of borrowing.

T. Copeland, J. Murrin and T. Koller's approach is based on the pentagram of structural modernization and enterprises restructuring.

The current property value of the company in question is the initial point.

The next step, according to these authors, is to assess the actual and potential cost of the organization's business, taking into account internal improvements from the expected cash flows and the potential value growth through restructuring funds.

After that, all assessments should be compared to the cost of the organization's securities on the stock market in order to assess the possible benefit to the holders of these securities from the reorganization of the company.

This comparison may affect and contribute to the identification of gaps in the perception of the future prospects of the company by potential investors and management.

The approach developed by K. Walsch, is based on the balance between the profit (income), assets, and growth rate. Managers of organizations are recommended to consider and establish those highest growth rates that the company may endure in the future. According to this approach, certain growth rates and cash flows from operating activities should be in the state of equilibrium. This model allows managers to focus on the fundamental factors that affect the business. These factors have a relationship with profit, current assets and growth rates.

S. Mordashev’s approach is formed on the analysis of susceptibility of business components: sales revenue, production cost of sales adjusted for interest payments, income tax rates, additional investment in excess of depreciation used to maintain a given level of sales, the growth rates of cash flow debt, cost of debt capital.

In contrast to the approach of S. Mordashev, the approach of I. Yegerev is formed on the sensitivity analysis of the enterprise’s production and financial cycle: the duration of the production cycle, the turnover period of materials, work in progress and finished goods, financial cycle duration, the turnover period of prepayments (received by suppliers) and receivables, the turnover period of prepayments from customers, values of receivables and payables and the discount rates.

The main drawbacks of these approaches is that they neglect the problems of investment decisions, the problem of the priority in choosing between investing in assets, liabilities or payment of dividends, as well as the choice between buying a property and its lease (Il’yashchenko, Chinakhov & Gotovshchik, 2014).

In the analysis of the foreign companies’ experience in business value estimation it was revealed that the process of determining the value is being constantly improved, as well as its methodological basis.

The most effective results of valuation of enterprises is observed in the USA.

In Russia, There a legal framework regulating the activities of business evaluation has been formed and methodological complex has been established on the basis of international and European standards.

There are three main approaches of business value estimation: profits, comparative, and costs.

The information used in this or that approach reflects either current position of the company (comparative approach), or its achievements (costs approach), or its future prospects, i.e. expected future revenues (profit).

The result obtained on the basis of the unity of the three approaches is the most proven and objective.

There is also a classification of approaches of business value estimation from different perspectives: business value, economic efficiency, social significance (Table 1).

**Table 1**  
**The main approaches to business value estimation**

<i>Main approaches and methods in business value estimation</i>			
<i>Economic efficiency</i>		<i>Social significance</i>	<i>Business value</i>
Comparative approach	Profit approach	Assessment of the	– The method of net assets;
– Capital Market Method;	– Direct capitalization method;	organization’s role in the	– The liquidation value
– Transactions Method;	– Discounted cash flow method	socio-economic structure	method
– Method of industry factors.		of the country’s region	

Each of the three approaches involves the use of the inherent approaches. The joint scheme of the enterprise business valuation from the initial stage to the end is presented in Table 2.

**Table 2**  
**The procedure of business value estimation**

<i>Preparatory stage</i>	<i>Analytical stage</i>	<i>Calculation stage</i>
1. Study and analysis of constituent documents	1. The analysis of the socio-economic situation in the country or region	1. Decide on the enterprise value: – using costs method
2. The subject, purpose and date of assessment	2. Industry analysis	– using comparative method
3. Forming a group of professionals involved in estimation	3. General assessment of financial status of company	– using profit method
4. Collecting baseline information	4. Valuation of current assets	2. Establishment of rating for each method
5. Task development and the conclusion of agreements for the assessment	5. Enterprise flows analysis	3. Decide on the final enterprise value
	6. Determination of the development prospects of the company	

For a more accurate and meaningful assessment of business enterprises, as well as improved system of cost control a comprehensive approach is necessary, based on the simultaneous use of the three approaches to assessment, taking into account all the features of the production process and economic conditions.

#### 4. RESULTS

Considering the basic approaches to business value estimation it is necessary to look into the adequacy of the use of predictive model of evaluation of the enterprise under consideration for previous years, or the data on the cost of identical or similar companies.

One of the approaches is using of the comparative method of business valuation.

Comparative valuation approach is based on the method of multipliers. In comparative analysis, it is an accepted assumption that similar organizations should have the same value. The difference in the valuation of identical companies is characterized by a difference in a particular factor or factors (Bashkov & Silnov, 2015). Thus, the organization valuation differs in proportion to the differing factors. The most common and widespread are the multiplier of prices, of profits, of cash flow, of earnings, and of the book value.

Therefore, the procedure of application of the comparative approach consists of three stages:

- determining the number of companies - analogues;
- selecting the relevant ones;
- drawing up a list of 3-5 companies to calculate the multiplier.

Costs, or property-related, approach includes consideration of the price in the form of costs. The essence of the costs approach is that the appraiser determines the fair market value of the assets and liabilities of the enterprise. If a difference is found between the market value of the assets and the cost of capital, it is possible to find the market value of the company's capital. Also important is the fact that the book value of assets and the capital of the enterprise does not match their market value. Then a re-evaluation of all organization's assets is required.

In this approach, the book value specified in the balance sheet, the market value and the cost of asset sale in the market are analyzed, taking into account the term of usage and accumulated depreciation.



In addition, there are components of cost estimation methods: the method of net assets, the industrial property valuation, the assessment of machinery and equipment, valuation of intangible assets, the valuation of financial investments and the liquidation value.

The profit approach is one of the most important in the assessment of business value. The discounted cash flow method is the most acceptable for the investor. One of the benefits and differences from the other approaches is the fact that it is based on the forecast of the company's financial statements and includes the analysis of market trends, the prospects of the company and the key growth factors that are highly appreciated by investors.

One of the limitations of using this method is that it uses retrospective analysis, which means that it can only be implemented in relation to those companies that have a certain history of financial reporting.

The use of the comparative approach can significantly accelerate the process of evaluation and therefore this approach is often used to obtain an approximate business value or as a control tool to verify the adequacy of value obtained through discounted cash flow method.

This approach is inferior to the profit approach since the importance of the differences between the companies financial lever is not considered.

The costs approach requires the longest time to implement. Despite this, it allows the evaluator to provide the most real business value assessment of business by conducting adjustment to the value of book assets and liabilities. The choice of the valuation approach is always dependent on the specific requirements to the evaluator and on the organization's characteristics.

This methodological basis of the business value estimation enables investors to identify the four main categories for safety investments when buying intrinsic value with a low risk of losing money:

- stability of a business - this indicator is the most important because the investor is not interested in investing money in undervalued assets, if the company has a chance or percentage of bankruptcy. A company is stable if the growth of equity proportional sale (EPS) over 10 years amounted to 7%, payable amounts are not more than half of net assets, there has not been a decrease in revenue for 2 years;
- dividend yield - the stability of the indicator suggests that even if the share price does not increase, the investor will still receive profit. Dividends should constitute not more than 2/3 of corporate bonds with a higher rating;
- investment in business, not in shares - this criterion has two requirements: the first – P/E is less than 40% of the average market value, the second – P/E is twice higher than the government bonds;
- buying companies below book value - its essence lies in the fact that even the most unprofitable share can be an excellent investment.

Thus, it is necessary to take into account all the factors in the process of business value estimation, as all parts of the structure enhance the production process of enterprises, the region, and the country.

## 5. CONCLUSIONS

The analysis carried out in the article shows that the approaches and methods of business value estimation are not mutually exclusive; on the contrary, they complement each other.

The need to be applied together, as each of them addresses the analysis of specific features and indicators, which have an impact on the enterprise value, its increase or decrease.

In carrying out the economic valuation, it is possible to select the most optimal method in determining the value of a business. Each method has its own advantages and disadvantages.

Thus one of the fundamental and defining approaches, as is mentioned earlier, is the discounted cash flow method, which gives the opportunity to generate cash flows in the future, taking into account the temporal value of money. It provides a realistic enterprise value assessment, and the usage of this method is effective for organizations with permanent capital structure and a long market history. Besides, this approach can be applied only in the case of annual dividend payments to the owners; otherwise, the cost would be too low and unprofitable.

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