ENTERPRISE VALUE MANAGEMENT IN CRISIS SITUATION: ACCOUNTING AND FINANCIAL APPROACHES

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Abstract

Economical instability of Moldova Republic, on the background of global financial and geopolitical crisis and sanction policies imposed by external partners, triggers the necessity of an integrated approach for value-creating processes for domestic enterprises and the development of new methods and strategies in enterprise value management, to help find benchmarks for maintaining and increasing value in times of crisis. The research identifies the essence of enterprise value management in a crisis situation and a model of enterprise value management in a crisis situation is proposed.

The author of research aimed to determine which and how modern methods of enterprise evaluation can be used to diagnose the situation in which an enterprise risks to enter in crisis and to destroy its value.

It highlights the peculiarities of enterprise value management in a crisis situation through the stage of the life cycle of the enterprise and in terms of two main approaches: accounting and financial.

Keywords: enterprise value, value-based management, financial crisis

JEL Classification: G32

Introduction

Economical instability of Moldova Republic, on the background of global financial and geopolitical crisis and sanction policies imposed by external partners, triggers the necessity of an integrated approach for value-creating processes for domestic enterprises and the development of new methods and strategies in enterprise value management, to help find benchmarks for maintaining and increasing value in times of crisis.

The 2008 global crisis has caused quite serious financial difficulties for many indigenous businesses (decline in business activity, declining production). Currently, not only small and medium-sized businesses, but also large companies are facing financial difficulties.

The negative impact of the financial and economic crisis on the short-term results of the domestic enterprises is manifested by the recording of the financial losses, the increase of the financial debts, which obviously leads to the reduction of the value of the enterprise. This can be exemplified on the basis of the 2008 and 2015 crisis observations, which have been manifested both by the reduction in the price of securities of the listed companies on the Moldova Stock Exchange. The results of the financial reports of the public enterprises have accepted depreciation of different types of assets, so that the investment attractiveness of enterprises, and therefore their value decreases.

Description of the Problem

In the age of crisis, the problem of business survival arises. This problem is resolved by the rational use of financial resources to optimize cost structure, property, equity and debt. In the face of many enterprises, the problem of the lack of financial resources and high costs related to the attracted capital service arises. Existing approaches to asset management, capital and finance have not ensured the optimization of capital structure and optimal cash-flow management. Despite the apparent development of financial strategies in economic science, many businesses, especially small and medium-sized ones, have been on the verge of bankruptcy.

The cause of the problems for most businesses is not the crisis itself, but the inadequate management decisions previously taken, possibly many years before the crisis.

The practice of developed countries demonstrates that value has a number of unique properties that make it the best decision-making criterion for crisis management and, in a broader sense, the

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best criterion for assessing the success of enterprise management in general. In a correct use, the value criterion allows for effective decisions that will improve the long-term economic situation of the enterprise.

We believe that recent events have underlined the value of business-driven enterprise value. Those who assimilated him pretty well, currently have important advantages. In particular, during the crisis, they focused better on the business environment because they were driven not only by the information provided by the market but also by the results of their own financial analysis and modeling of enterprise value.

In the literature, the issue of managing the value of the enterprise in a crisis situation is practically not approached, the possibilities of using the value of the enterprise in the anti-crisis management, the merger and the takeover of the enterprises are investigated [3, 5, 6], and some sources address the given issue through the management and the assessment of insolvent enterprises at different stages of the insolvency process [7].

Results Obtained

1. The Value Management Model of the Crisis

The events of the international financial crisis have shown that the market price for listed companies and the transaction price for private enterprises can not serve as a benchmark for crisis management decisions. However, the limited capacity of the market to determine the internal value of the enterprise does not question the timeliness of the value-based approach. On the contrary, the orientation towards the internal value for existing enterprises under disproportionate prices is a well-grounded approach to managing the business in times of crisis.

By synthesizing the bibliographic sources in the field [1, 3, 4, 5], the author identified the essence of enterprise value management in a crisis situation characterized by the following:

1. The main indicator of the business situation in times of crisis is the internal value for the owner. It is very important to determine the value of the business, regardless of the market and investors' reaction and behavior. As the crisis progresses, we can reevaluate the enterprise to find out the dynamics and analysis of the causes that have generated changes in value;
2. In times of crisis, the use of enterprise value management concepts makes it possible to make decisions that are not obvious. For example, under normal circumstances, loss of market share can be seen as a defeat, and in times of crisis, a conscious reduction in activity can lead to an increase in value;
3. Essential changes in the external environment require us to give weight to value factors. It will determine the value factors register and the impact of each factor on the value of the enterprise, after which focus attention on the most important ones.
4. Modeling possible changes in value factors allows us to assess the risks and verify the company's safety margin;
5. If the company resists the safety test, we can say that its strategic possibilities not only allow the crisis to pass, but also make a leap as the crisis ends. It is necessary to predict the evolution of value factors during the development of the crisis.

Anticrisis management in the context of enterprise value management presents the creation of a system of principles and methods of elaboration and realization of a complex of managerial decisions aimed at preventing and overcoming the reduction of the value of the enterprise and minimizing the negative consequences on the enterprise.

The primary purpose of enterprise value management in a crisis situation is to recover the financial condition of the enterprise and minimize the value of the enterprise, caused by financial crises.

According to the author, in the process of achieving its main purpose, the management of the value of the enterprise in a crisis situation has to achieve the following basic tasks (Figure 1):

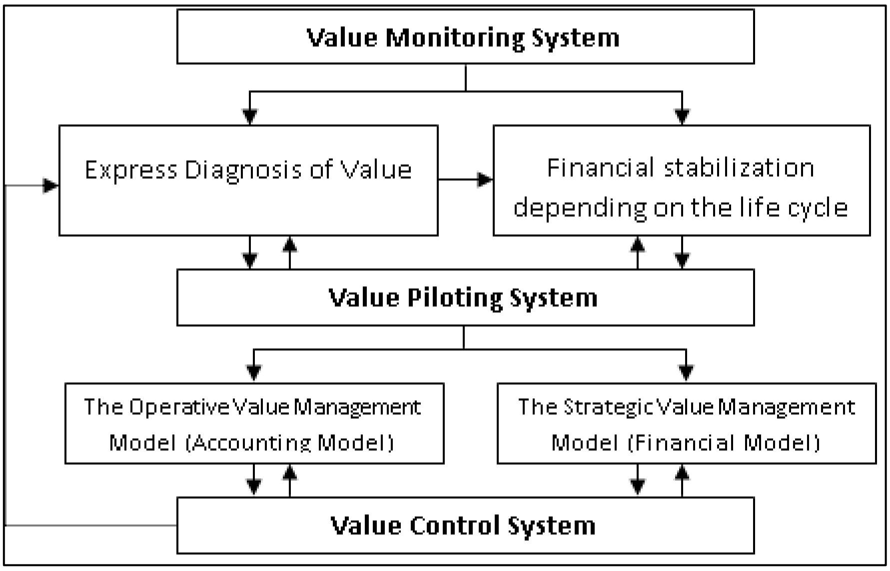
1. Implementing a value monitoring system, which will signal the enterprise's management of the evolution of value and which will be achieved through:
   - the emergency diagnosis of the crisis;
   - balance the domestic financial situation with the life cycle.

2.Implementing a value piloting system that will be achieved through:
- Operative value management (short-term);
- Strategic value management (long-term).

3. Implementing the value control system.

Based on the above mentioned task, we believe that they can be the basis of the value management system and we recommend the following model of the value management system.

Figure 1 - Business Value Management System in Crisis Situation



Source: elaborated by the author.

By addressing the issue of managing the value of the enterprise in overcoming the crisis situation, *first of all* we consider it important to establish a *crisis diagnosis mechanism*, namely the situation in which the company starts to lose its value, which is the premature signal of crisis of the enterprise.

2. Diagnosing the Crisis of Value

In order to solve the given problem, we propose to diagnose the process of entering the crisis enterprise by using the enterprise assessment tools (methods). Our approach is based on the fact that the current (internal) value represents the initial stage, and at the same time the point of control (landmark) in the anti-crisis management. Namely the evolution of the fundamental value signals incipient and prematurely entry of the enterprise in crisis.

As mentioned in previous research [2], the modern enterprise evaluation tool is based on three methods: the expenditure, revenue and market (comparative) method.

We believe that the basis of each valuation method is the fundamental value-creation signals that we have examined in terms of growth models of enterprise value. In our understanding of the basis of the expenditure method is the discrete model of the increase in the value of the enterprise, but in general, the value of the enterprise itself is estimated based on the size of the capital and reflects the current prospects of the enterprise. The basis of the revenue method is the model of continuous value growth, and the value of the enterprise expands through the mechanism of updating future cash-flows and reflects a long-term vision of the enterprise's development. The theoretical basis of the comparative method is the general-scientific method of the comparative analysis, and the basic premise of its application is the existence of a developed financial market.

As a result of the systematization of modern enterprise valuation methods and various criteria for value creation, the author of this research determined the scope of their use in detecting the situation of entering the enterprise in crisis and destroying the value of the enterprise.

Table 1

Diagnosis of the crisis situation based on the enterprise evaluation methods

No.	Estimated value based on different methods	Conclusions
1.	$V_p > V_v$ $V_p > V_c$	The enterprise is growing, there is an increased investment demand on the enterprise, the development potential is undervalued, the high liquidity of the shares and other securities
2.	$V_p < V_v$ $V_p < V_c$	Enterprise is declining, low investment demand on the enterprise, low liquidity of securities
3.	$V_v < V_c$	Existence of signs of worsening of the financial situation and orientation towards short-term development perspectives
4.	$V_v > V_c$	The existence of signs of improvement of the financial situation and the appearance of the long-term development prospects of the enterprise
unde V_p – the value of the enterprise obtained on the basis of the comparative (market) method; V_v – the value of the enterprise obtained on the basis of the revenue method; V_c – the value of the enterprise obtained on the basis of the expense.		

Source: elaborated by the author.

The analysis of paragraphs 1 and 2 of table 1 determines the appropriate time to sell the business on the basis of a comparison of the enterprise's market value with the basic amount.

The analysis of points 3 and 4 of table 1 sets out the prerequisites for addressing the financial crisis of the enterprise based on an indicator - the enterprise value indicator, its dynamics and the ratio between value indicators estimated on the basis of the discrete and continuous growth model formulas.

Based on the obtained results, namely establishing the mechanism of the interdependence between the enterprise's value and the financial state of the enterprise, by which the improvement of the financial situation of the enterprise is explained by the change of the factors of the value of the discrete and continuous growth model, the author solves the problem of creating the premature diagnostic model of the entry of the company into crisis and the loss of value in the near future.

3. Particularities of Financial Stabilization at Different Stages of the Life Cycle

The second step is the *financial stabilization of the enterprise* in order to monitor the value of the enterprise in a crisis situation. But taking into account that financial crises can be triggered at different stages of the life cycle, we consider it important that the financial stabilization process contains as core tools the management of key value impact indicators specific to that life cycle stage.

Manifesting at any stage of the enterprise's lifecycle, the financial crisis hinders the development of the enterprise, substantially increasing the life cycle stage. Characterizing this particularity of the financial crisis, it should be noted that its manifestation at every stage of the life cycle has its own peculiarities, which must be taken into account in the process of financial stabilization of the enterprise's crisis management value.

The business lifecycle for different countries and different industries is diverse, but the life cycle curve for all businesses is the same. The life cycle curve consists of different stages describing the company's dependence on internal and external factors occurring over a certain period of time. Each stage can be attributed to financial factors that influence the value of the enterprise, which were generalized in table 1.

In the framework of the company's financial stabilization, we propose to examine the enterprise based on three financial dimensions: liquidity, risk and value.

The analysis of the enterprise at different stages of the life cycle through the financial component will allow us to solve two tasks: to detect the changes that are characteristic of each financial dimension and to introduce a new aspect in the issue of the enterprise movement from one stage to another in the life cycle.

The start-up phase is characterized by the creation of the enterprise, therefore at this stage the value of the enterprise is highly conditioned by the forces outside it, the financial activity being just a beginning. However, from the financial point of view, the value of the enterprise at this stage can be defined by the enterprise's net assets (the value of the invested capital).

Table 2

Organizational and financial particularities of the enterprise at different stages of the life cycle.

Stage of life cycle	Financial peculiarities	Organizational features	Dependence on external factors	Dependence on internal factors
Start-up	The high share of borrowed funds, high financial risk, low profitability indicators	Gradual entry into the market, intensive marketing, establishing contracts with suppliers and creditors	Strong	Weak
Growth	Optimal financial risk, high production risk, high profitability indicators	Intensive modernization, increased production quality	Neutral	Neutral
Maturity	Optimal overall risk, high returns, reduction of rotation coefficients of circulating assets	The total employment of all resources, the gradual immobilization of the working capital, the wear and tear of the fixed assets	Weak	Strong
Decline	Total high risk, low returns, rotation and solvency indicators	Poor marketing, loss of trust by suppliers and creditors, resource wear	Strong	Strong

Source: elaborated by the author.

Throughout the start-up phase, the cash-flow of the enterprise from the operational and investment activity is negative, respectively to feed the enterprise with financial means, the enterprise resorts to external financial sources, registering a positive cash-flow from the financial activity. The negative cash-flow in the operational activity is explained by: (1) low efficiency due to low production volumes and the existence of losses; (2) there is still a need for investments in the company's working capital to increase the production volume. Usually, the increase in current assets takes place from the investment of the founder of the business.

Therefore, I believe that at this stage an unusual situation, for which the existence of the financial crisis is characteristic. The crisis enterprise develops on the basis of a determined logic, which contains the following phases:

1. *the crisis of the strategy* - involves special errors in product portfolio decisions, inappropriate industry and competition misconduct, or mistaken positioning of the firm;
2. *crisis of results* - errors in investment activity and minimum return on invested capital;
3. *liquidity crisis* - insufficient financial resources to solve the company's tasks.

The development of the crisis based on the above logic is possible at any stage of the life cycle.

If we are to take into account the particularities of the movement on the trajectory of the life cycle, then we can highlight the particularities in the formation of the sufficiency of financial means at different stages. We will then examine the changes in liquidity as they move to a new stage. Changes analysis will allow to complement the life cycle concept with financial crises, which are generalized in table 2.

On the basis of table 2 data, we see that the following financial crises are characteristic of the launching phase: the liquidity crisis of the enterprise and the liquidity crisis of the owner's capital. The first type of crisis is caused by the disproportion between working capital in cash and the increasing needs of the business. For the owner, the crisis consists in creating a negative free cash-flow, and thus reducing the value of the enterprise.

In order to overcome the liquidity crisis, it is necessary to manage the working capital prudently by correlating the growth rate of current assets with the rising debt ratio, reducing the growth rate of some current assets by using their efficiency and optimizing volumes. The task of management is to bring the enterprise's operational flow to the area of positive dimensions. Therefore, the key process is *to transform the entrepreneurial energy into a constant cash-flow from the operational activity*.

Table 3

Liquidity and financial crises at different stages of the life cycle

The type of crisis	Start-up	Growth	Maturity	Decline
Business liquidity crisis	Permanent negative CF from operational activity	Periodically negative CF from operational activity	It's not a feature	Periodically negative CF from operational activity
The liquidity crisis of the capital's owner	Permanent negative CF for owners	Periodically negative CF for owners	It's not a feature	Periodically negative CF for owners
Financing crisis	The impossibility of attracting borrowed capital and reducing capital expenditures	Relation between equity and unpaid debt		

Source: elaborated by the author.

In order to manage the value of the enterprise at the start-up stage, particular attention should be paid to liquidity and financial stability indicators. Since this period is characterized by the start of production and the lack of full use of production capacities, it is not rational to make any conclusions based on profitability or rotation indicators. As a rule, at the start-up stage, the share of sources borrowed in the enterprise's liability is important, which increases the financial risk, therefore corporate value management actions will aim to stabilize the financial indicators.

At the growth stage, the basic process consists in *turning the cash-flow into market share*. The entire duration of the stage is disturbed by management crises: the first group of crises leads to the delimitation of the function of the entrepreneurial function management, and the second group is focused on the crash of the entrepreneurial and owner roles. The entrepreneur faces the dilemma of sharing ownership with new investors, because it is necessary to share the control over the company to solve the growth task. Solving the growth burden on account of borrowed capital, but not from the equity account, is confronted with the credibility of the enterprise and the quality of the attracted credit management. Thus, a necessary problem to solve at this stage is *the strategic character of the capital structure*, which is conditioned by:

1. the impact it has on the weighted average cost of capital. The small share of borrowed capital de facto denotes the non-use of cheaper financial resources than its own capital. Respectively, the enterprise has high capital expenditures;
2. the strategic nature of the capital structure shows that attempting to solve growth on loans without attracting new investor-owners leads to the emergence of specific effects linked to the considerable weight of borrowed capital in the capital structure. These effects create barriers to enterprise development, that is to say, related to the selfish investment decisions of management that lead to conflicts of interest between the manager and the owner. Given the large share of the borrowed capital, the manager will either select high-risk investment projects, or refuse to invest in projects with a risk similar to the enterprise. In the first case, the phenomenon of corporate finance has been called the substitution of assets or the change in the risk profile of assets, and in the second it is refused investment or insufficient investment.

At the same time, we tend to mention that with the increase in financial risk, the company's competitive immunity is diminished by stealing funds in servicing loans, to the detriment of investing in development.

The specificity of financial crises at the growth stage consists of:

– changing drivers of the enterprise's liquidity crisis, which is linked to rhythms of growth. Thus high growth rates can lead to the formation of a negative cash-flow from operating activity not because of losses but due to enormous investments in working capital.
– the dilemma of the simultaneous financing of the increase in production volume and the acceleration of investments. The task of growth requires the solution of the issue of capital investment and the acceleration - long-term investment in development.

In order to manage the value of the enterprise at the growth stage, rotation and profitability indicators are of particular importance. The higher the level of these indicators, the higher the value of the enterprise.

The maturity period occurs as a result of the increased use of all the forces of the enterprise, it is manifested through the involvement of all resources (labor, land, production capacities, capital, entrepreneurial skills) and the maximum production, which means effective use and distribution of resources. At this stage, the role of internal factors, namely financial ones, in managing enterprise value is maximal, as external conditions are beneficial to a mature enterprise.

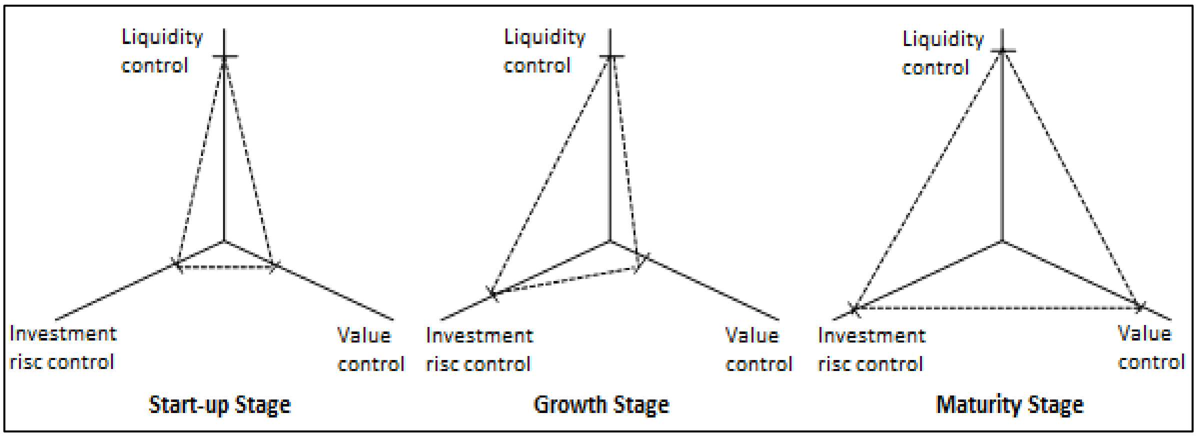
At this stage, the enterprise undergoes a new series of crises, and in a normal development it has a scattered capital structure. Financial liquidity crises are not current. Following the definition given by Boston Consulting Group specialists, the enterprise becomes "milking cow". However, the causes for the onset of financial crises are preserved.

In order to manage the value of the enterprise during the maturity period, particular attention will be paid to the status of returns on sales, return on assets and equity, and the duration of rotation, that is to say the financial component of the stability of the enterprise. But if the indicators of financial and production risk are high, then liquidity and solvency indicators will required to be stabilized. The deviation of the financial indicators from the average values per branch in the maturity period tells us about the financial instability in the operation of the enterprise and if no remedial measures are taken, the enterprise will find itself in a difficult situation.

Among the basic signals certifying the reduction of the financial value of the enterprise in the maturity period may be, first of all, the physical and moral wear and tear of fixed assets, the renewal of which requires the attraction of additional resources, which leads to the increase of the risk indicators of the enterprise. However, if management will strictly plan its actions and move to a new technologically high level, while increasing the volume and quality of goods, then the company will move to a new life cycle in the growth period, thus avoiding the period of decline.

Analyzing the possibilities of applying value management theory to enterprises in crisis, we developed and systematized the vectors to monitor the main financial indicators of enterprises according to the life cycle of the enterprise presented in Figure 2.

Figure 2 - The vectors of decisional efforts at different stages of the life cycle



Source: developed by the author.

For the effective management of the value of the enterprise at different stages of the life cycle, the evaluation criteria must be individual for each step, as they directly depend on the factors that influence the enterprise at a specific stage of life cycle. The company evolving over time is subject to changes in the structure of assets and liabilities, competitiveness, fixed assets and other factors. Thus, depending on the life cycle stage, there are a number of priority directions in enterprise value management, which is based on the specificity of problems that correspond to one or another step.

However, a key issue of contemporary financial management science is to develop and propose solutions to the possibility of obtaining long-term benefits from economic crises. In order to solve the given problem, we need to move to the next stage of the crisis management model, namely the value piloting system.

4. Company Value Pilotage: Accounting and Financial Approaches

In solving the concrete operational tasks and key drivers of enterprise value in a crisis situation, we need to divide and highlight two models of activity analysis. Accounting model is based on traditional treatment for accounting for the company's capital and the results of its use. The second analytical model can be called the financial model, and is developed in accordance with the principles of corporate finance.

The differences in the analysis models of the business are of a principled nature. The contemporary enterprise operates in an environment that has at least three dimensions: the first and the basic one - the risk and the uncertainty; the second - the profitability, which corresponds to the investment risk; third - the liquidity, the ability to rapidly transform into cash-flows the products and the results of the activity. According to all three dimensions, the accounting and financial models differ. Breakdowns begin right beginning of tracking of the benefit of the company. The accounting view is based on the actual operations performed by the enterprise and excludes from the analysis the alternative possibilities of the activity and basically ignores the variants of development.

The successful outcome, based on the logic of the accounting model - is when the income obtained exceeds the recorded expenses. He does not express the basic conception of contemporary economic analysis of creating economic profit. The basic principle of the economic profit analysis takes into consideration the alternatives of placing capital with a certain risk and with an economic effect that corresponds to the risk, or takes into account the lost investment income.

The second essential limitation of the accounting model as an analytical basis for creating the enterprise value management system is that this model does not direct the analysis to the uncertainty of the expected outcome. The accounting model can not answer the question, if the return of the enterprise at the risk of the investor is comparable, it compensates for the risk and that is sufficient for the investor.

The analytical tradition created in the accounting approach focuses on the profit indicators calculated as a tool for expressing the result of the company's business for a period of management. However, to solve management tasks it is necessary to reflect liquidity, so the modern financial model operates with the free cash-flow (FCF) indicators.

The fourth principle of the accounting model implies the nominal treatment of the result expressed in monetary units. There is no investment treatment of the outcome here. This model does not question the size of the expected outcome in the future or the lost income.

The key to the enterprise's financial model is the use of economic profit to reason the decisions and analyze the results of the business. Economic profitability assesses quantitatively whether sufficient cash-flows are created to ensure a satisfactory level of income for the owner of the company. This satisfactory level must be sought in the area of risk analysis. Driving with assets managed without the risk and revenue valuation that would correspond to these risks does not correspond to both the financial management tasks and the strategic management tasks. For this reason, the financial model of the business activity analysis expresses quantitatively the purpose of the development in terms of the capital value of the company's owners.

Conclusions

The value-based management of enterprise concept relies on the paradigm shift of enterprise analysis and alignment with the principles of the financial model for argumentation of key decisions. In our opinion, here is the primary cause that allows us to consider value-based management as an innovation in management. Such a change of paradigm takes place in the developed countries' business environment when companies move to implement this concept. Notwithstanding the fact that Moldovan business has still non-corporative organizational form, and at the moment has formal arguments to ignore the evolution of the shares, such a change of the paradigm is most needed. The insistent need for assimilation of the new analytical apparatus is dictated, in our opinion, in addition to the national specificity. The Moldovan business and its management grew on the basis of the planned economy. In the absence of the alternatives of administrative thinking, it became a managerial tradition, to actually take decisions that do not have sufficient knowledge of profitability analysis, do not understand the discrepancy of the evaluation of the decisions taken based on the accounting tradition. The tendency, in which an analysis does not correspond to the essence of the competition requirements for the investors' capital, must be interrupted.

Future Directions to Be Approached

As an objective for future research, we consider developing enterprise accounting models, based on accounting indicators, and strategic value management model based on value-based management indicators.

Priority is also the issue of establishing a value control model that would help business management control the value creation processes within the enterprise.

Bibliography

Black A., Wright Ph., Bachman J. E. (1998), In Search of Shareholder Value: Managing the Drivers of Performance. London. Price Waterhouse.

Beşliu I. (2004), Metode şi tehnici utilizate la evaluarea patrimoniului unei societăţi comerciale, Economie şi sociologie, nr. 1, pp. 77-86.

Copeland T., Koller T., Murrin J. (2014), Valuation: Measuring and Managing the Value of Companies. New York. McKinsey & Company, Inc.

Damodaran, Aswath, (2012), Investment Valuation: Tools and Techniques for Determining the Value of any Asset. University Edition. John Wiley & Sons.

Walsh, Ciarian, (1996), The key management ratios. Pitman Publishing.

Грязнова А. Г., Федотова М.А. (2001), Оценка Бизнеса. - Москва, Финансы и статистика.

Чернозуб Олег (2010), Жизнь после кризиса: Стоимостной подход к управлению частной компанией, Альпина Паблишер.