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APPLIED STRATEGIC ANALYSIS CONCEPT DEVELOPMENT: FINANCIAL ASPECT

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ABSTRACT. *The article considers theoretical aspects of the applied strategic financial analysis based on the financial element of the balanced scorecard to be applied in the research process of the strategic organization financial activity aspects. The methodology of the research is the Balanced Scorecard concept (BSC) introduced by R. Kaplan and D. Norton as well as the concept of the applied strategic analysis concept having been developed by the author, and the methodological approach to the target forecast of the organization financial flows resulting from the results of its financial position analysis. The applied strategic financial analysis is depicted to encompass comparative assessment, variances diagnostics and indicators forecast of the financial BSC element within the strategic financial goals. The author draws a conclusion that the applied strategic financial analysis is a sufficiently effective instrument to research strategic aspects of the organization financial activity and to form an analytical support for its strategic financial management.*

KEYWORDS: Applied Strategic Financial Analysis, Applied Strategic Analysis, Balanced Scorecard.

JEL CODES: G30, M19, M41.

INTRODUCTION

Any management decision whether operations updating, stuff retraining or a new product development is evident to be realized under appropriate conditions. It is a financial aspect that plays a key role in selection of the one emphasizing financial management as one of the essential elements of the entity management process (an enterprise, a firm, a company, a business unit) in present-day economic environment. In addition, a significance of the financial management as a subsystem of the organization management process is defined by the finance coordinating role within its activity.A present-day theory of financial management assumes that a primary goal of business is to ensure maximum shareowners' better-off (should a company be a common stock company), i.e. to maximize the company market value expressed by its maximum common stock price.The statement presumes that it is the shareowners' better-off maximum growth that arranges other organization activity' goals in the appropriate order and ensures that it is being invested in the long run.

So, being an inherent element of the overall economic organization strategy the financial strategy must be aimed at the attainment of the primary business goal sought.

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The problem mentioned requires improving an analytical support of the organization financial management, especially its strategic aspect, its financial activity being a long-term process. In view of the mentioned above the author of the article seeks to consider his applied strategic analysis to be employed as the analytical support of the organization strategic financial management.

LITERATURE REVIEW

To enhance strategic management efficiency in difficult conditions of the present- day market economy we have developed the applied strategic analysis (ASA) to improve its information-analytical support, to evolve theory, methodology and methods of the overall strategic economic activity aspects to the level of the financial analysis being an efficient research instrument of the financial aspects of the organization economic activity based on the financial indicators and described experience. ASA, as a strategic management function, assumes an overall research of the strategic economic organization activity aspects based on the BSC (Krylov,2013, 2014).The Balanced Scorecard concept as an analytical instrument applied in the field of strategic management was developed by American scientists Robert Kaplan and David Norton at the beginning of the 90s of the XX century (1992) evolving both in their works (Kaplan & Norton, 1996, 2001, 2003, 2004, 2005, 2006, 2008), and those of other scientists studying economics (Friedag & Schmidt, 2002; Horvath & Partners, 2004; Maisel, 1992; Norreklit, 2000; Olve, Roy & Wetter, 2000; Rampersad, 2003), and was multiply tested. At present BSC is considered to be one of the essential instruments of the organization management system.

The main reason to develop BSC was a contradiction between contingencies aimed at setting up wider competitive opportunities and immobile accounting system (financial accounting system).

Balanced Scorecard as a whole is understood as an aggregate of parameters featuring an overall organization performance in up-to-date market economy. It reflects a balance to be brought about between short-term and long-term goals, financial and non-financial indicators, basic and auxiliary parameters, as well as internal and external factors of the organization economic activity.

The scores of the balanced system are formed depending on the outlook and strategic goals of any particular organization and have individual features. They represent a balance between external accounting data for the owners (shareholders) and internal characteristics of the most significant business processes, innovations, training and growth that is the balance between the results of the organization performance and future growth. The system comprises a combination of objective quantity estimated data and subjective somewhat arbitrary parameters of future growth.

The main goal of the Balanced Scorecard is to transform a company strategy into specific tangible objectives, indicators and end up with events. The BSC scores are selected so that the organization managers and employees focus on the factors to enhance the organization competitiveness, the BSC to be accessible for the employees of all levels. The ‘front-end’

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employees should be well aware of the financial consequences of their decisions and actions, while top managers must be committed to the long-term financial success.

The Balanced Scorecard is founded on the cause and effect; results attain factors and their interrelation with financial data.The Balanced Scorecard encompasses four basic interrelated elements: finance, a customer, internal business processes ones as well as training and personnel development element considered through the prism of key problems, strategic goals, indicators and their target values and strategic events as well.The BSC scores enable to characterize comprehensively an activity of commercial, government and non-for-profit organizations, the scores being relatively few (about 25 scores in average, as a rule).It should be taken into consideration that basing on the balanced scorecard system special for any particular organization the Applied Strategic Analysis lacks any standard methods. Hence, the ASA methods are special as well for any particular organization.

The goal of the applied strategic analysis implementation is to form analytical support for taking strategic management decisions.
The ASA objectives are as follows:
1. Comparative assessment of the balanced scorecard assuming comparison of their outcome and target figures, determination of the BSC real and target figures variance and qualitative characteristics of the variance.
2. Diagnostics of the balanced scorecard variance enables to find out the results attaining factors having impact on the general or outcome BSC indicators and determine the variance value.
3. Balanced Scorecard forecast is of the purposeful nature. In case of the objective conditions the Balanced Scorecard forecast is targeted at the primordial determination and/or correction of the target BSC scores values and either determination of the specific ways of their attainment or the development of the events aimed at the elimination of the variance emerged between outcome and target BSC scores values in the future.
Applied Strategic Analysis lacks any standard methods as all its objectives are interrelated so each consecutive objective follows from the previous one. For example, the diagnostics is exercised basing on the results of the BSC elements comparative assessment while their forecast takes into account the diagnostics results.

Three interrelated and agreed ASA aspects stand out:
1. A strategic aspect proper. Within the aspect evaluated, diagnosed and forecast are final BSC indicators values at the time of the developed strategy functioning, i.e. their strategic values.
2. A tactical aspect. Within the tactical aspect of the BSC analysis we evaluate, diagnose and forecast interim BSC indicators values by the end of the year, i.e. their tactical values.
3. An operational aspect. Within the operational aspect of the BSC analysis evaluated, diagnosed and forecast are interim BCS indicators values by the end of each month, i.e. their operational values.
The results of the analysis of the operational BSC indicators values impact on their tactical values and the results of the tactical value analysis influence strategic ones.
The basic ASA method comprises methods of absolute, relative and average values, comparison, grouping, graphical and table methods, correlation and regression analysis, cluster analysis, factoring, as well as expert evaluation method.

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The applied strategic analysis is accomplished by deduction that presumes, firstly, an investigation of the general BSC indicators, then specific ones, and defines general sequence of the ASA analysis according to the following leads: financial indicators analysis, customer indicators analysis, internal business-processes indicators analysis, training and personnel development indicators analysis.Each of the basic ASA leads, financial, customers, internal business-processes as well as training and personnel development is represented through the prism of its basic objectives: evaluation, diagnostics and forecast. The ASA commences from the comparative evaluation of the financial indicators and is completed by the forecast of training and personnel development.

The basic leads of applied strategic analysis mentioned above can be transformed into separate groups:

1. Applied strategic financial analysis.
2. Applied strategic customer analysis.
3. Applied strategic analysis of internal business-processes (comprising applied strategic analysis of after-sales service, applied strategic operational analysis and applied strategic innovative analysis).
4. Applied strategic analysis of training and personnel development.

Discussing the ASA contents as a complex category of economics in his previous works the author has assumed the Applied Strategic Innovative Analysis (ASIA) to be a kind of the applied strategic analysis presuming overall complex research of the strategic aspects of the organization innovative activity based on the innovative balanced scorecard element (Krylov, 2014). The present article treats the following kind of ASA – applied strategic financial analysis.

THEORY AND METHODOLOGY

Concept and Essence of the Applied Strategic Financial Analysis

An applied strategic financial analysis (ASFA), a kind of the applied strategic analysis, assumes a complex, comprehensive research of the strategic financial organization activity aspects basing on the financial element of its balanced scorecard. It can also be considered as a facilitating function of the strategic financial management.

ASFA subject is the financial BSC element indicators and the factors specifying them.

ASFA object is strategic organization financial activity aspects.

The aim of the applied strategic financial analysis is to form an analytical support of taking strategic decisions in the field of financial activity management.

The ASFA objectives are as follows:

1. Comparative assessment of the financial BSC element indicators.
2. Diagnostics of the financial BSC element indicators variances.
3. Forecast of the financial BSC element indicators.

Notice, that all the objectives are closely interrelated as each subsequent objective follows from the previous one. So the diagnostics is effected by the results of the comparative evaluation of the financial BSC element indicators and their forecast considers the diagnostics results.

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Comparative assessment of the financial balanced scorecard element implies a comparison of their real and target figures, finding a variance of the real financial balanced scorecard element figures from the target ones and their qualitative variance characteristics (Table 1). The qualitative characteristics of the financial BSC element real and target figures variance depend on their value (Table 2).

Table 1. Comparative Assessment of the Financial Balanced Scorecard Element

Balanced Scorecard indicator	Target figure	Real figure	Variance		Qualitative variance characteristics
			absolute	%	

Table 2. Estimation of Qualitative Variance Characteristics of the Financial BSC Element's Real and Target Figures

Variance value, %	Qualitative variance characteristics
Up to ± 1%	Fairly small
From ± 1% to ± 5%	Essential
From ± 5% to ± 10%	Significant
From ± 10% to ± 20%	Large
± 20% and higher	Very large

The diagnostics of the financial Balanced Scorecard element indicators variance is based on the cause and effect links combining BSC values, the financial element included, into the balanced complex of general indicators and their specifying factors (results attaining factors).While diagnosing the financial BSC element indicators variance found are the results attaining factors, which are mostly impacting on the general or outcome indicators of the financial Balanced Scorecard element, and determined is its value.It should be noted that outcome financial indicators are final, i.e. more general BSC indicators. Hence, a factoring model of the balance system financial indicators, a block-scheme of the generalized factoring model presented in Fig. 1 comprises the outcome financial BSC element indicators as final (the most general) ones and seven levels of the defining factors:

1-st level factors: factoring financial BSC element indicator;

2-nd level factors: outcome indicators of the BSC customer element and some outcome indicators of the BSC internal business processes indicators;

3-rd level factors: factoring indicators of the BSC customer element and some factoring indicators of the BSC internal business processes indicators;

4-th level factors: some outcome indicators of the BSC internal business processes indicators and training and personnel development element indicators;

5-th level factors: some factoring indicators of the BSC internal business processes indicators and training and personnel development element indicators;

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6-th level factors: some outcome indicators of the BSC training and personnel development element indicators;

7-th level factors: some factoring indicators of the BSC training and personnel development element indicators.

The computation results of the factorial indicators impact on the outcome financial BSC elements indicators defined presented are in the form of a table (Table 3).

The appropriate deductions are drawn from the computation results.

The financial BSC element indicators forecast are of the purposeful nature. In case of the objective conditions the values of the financial BSC element indicators forecast is targeted at the primordial determination and/or correction of the target values of the financial BSC element indicators and either determination of the specific ways of their attainment or the development of the events aimed at the elimination of the variance emerged between outcome and target values of the financial BSC element indicators in the future. Notice, that the forecast commences with the general (outcome) indicators, the factoring ones being derived from them. The results of the forecast of the financial BSC element indicators values are presented in the form of a table (Table 4).

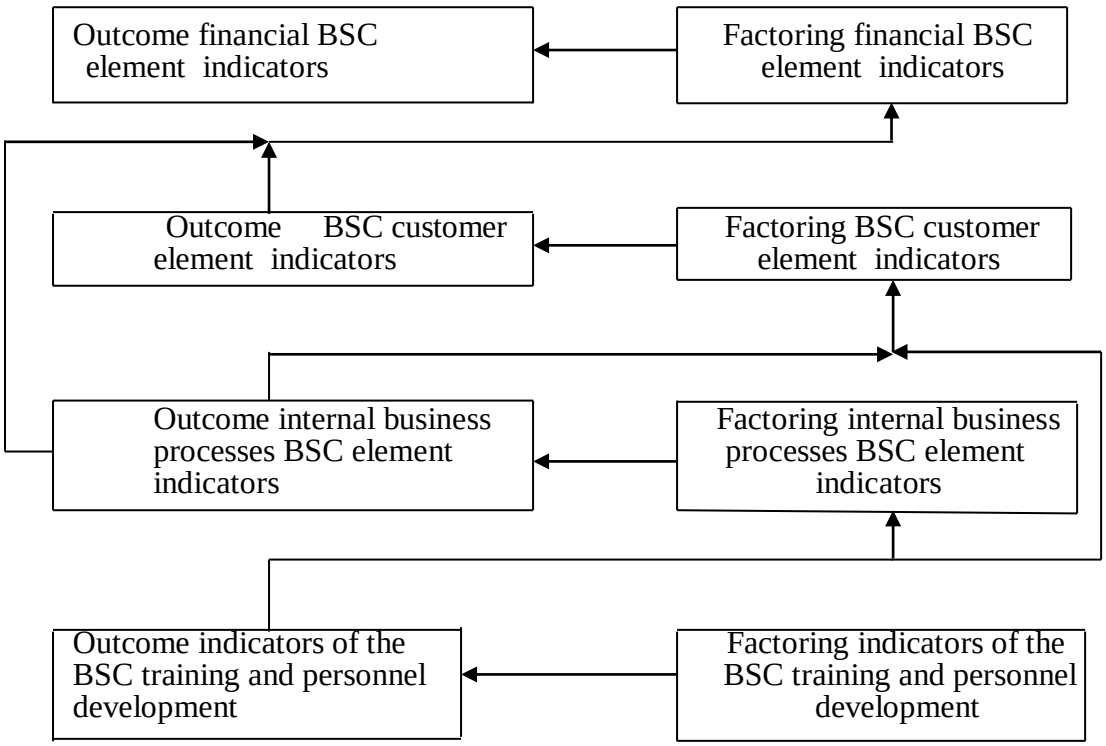

Figure 1. A block-scheme of the factoring model of the financial BSC indicators in terms of its separate elements

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Table 3. The Computation Results of the Factors Impact on the Outcome Financial BSC Element

Indicators Variance

Outcome financial BSC element indicators	Absolute Variance	Factoring indicators impact											
		1st level			2nd level			…			7th level		
		…	…	…	…	…	…	…	…	…	…	…	…

Table 4. The Results of the Forecast of the Financial BSC Element Indicators Values

Financial BSC element indicator	Factual value	Target value	Variance		Comments
			Absolute	%	

It should be noted, that the goal of the financial BSC element indicators values forecast is to strengthen a stability of the organization financial position assuming that the essential indicators of its statistical financial position {financial ratios) are being improved in the long run (during 5 years and more). It should be logically based on the long-term target forecast of the organization cash flows, their block-scheme being presented in Figure 2.

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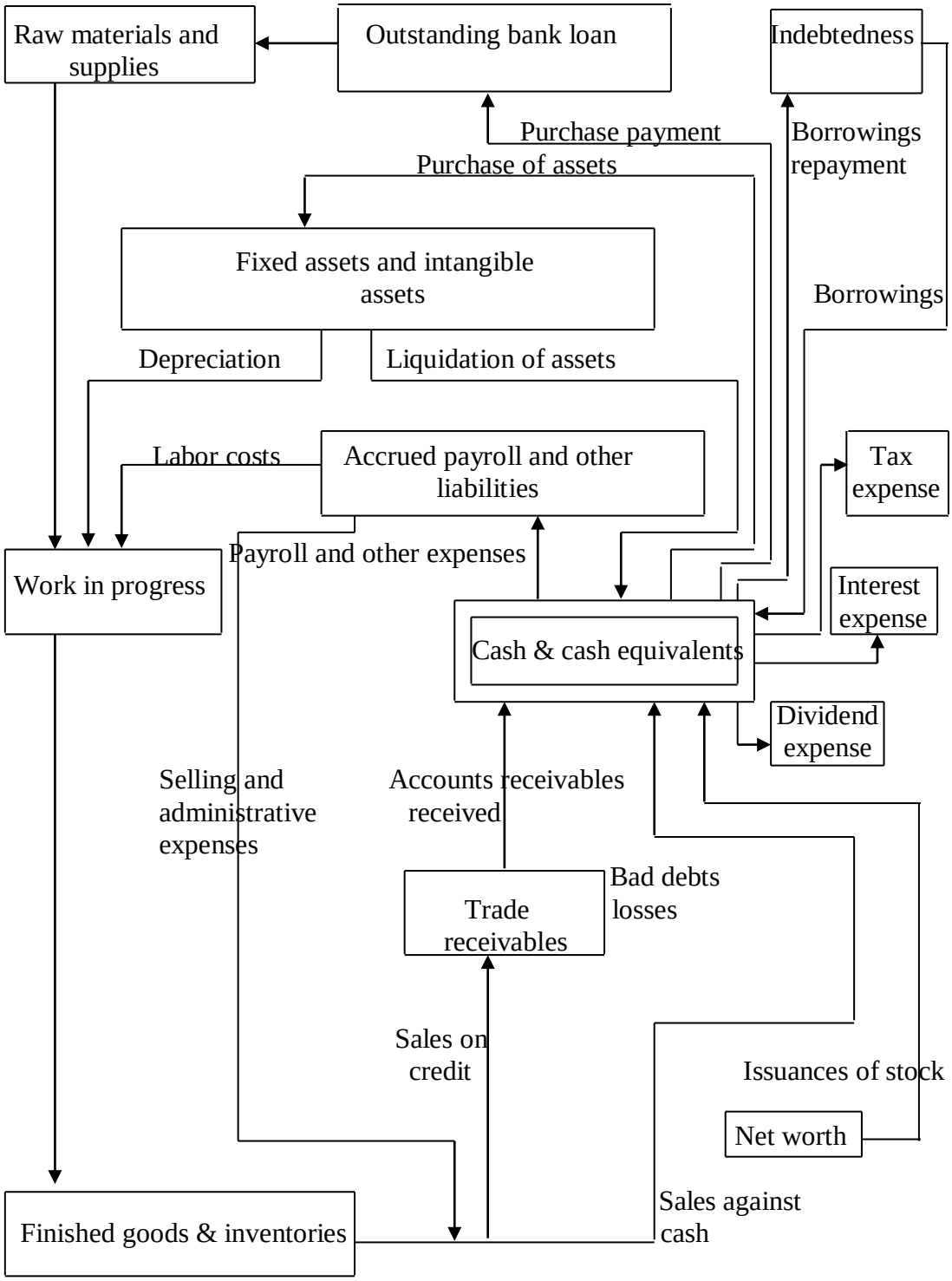

Figure 2. A block-scheme of the organization cash flows

The development of the long-term target forecast of the organization cash flows is presented by the block-scheme in Figure 3 and composed of the following steps (Krylov, 2012):

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1. Calculated are financial ratios values basing on the initial balance sheet data (preadapted to the organization cash flow system) and additional information (cash flow indicators and other forms of accounting).
2. Corrected (improved) is one or several financial ratios should they be unsatisfactory. It should be noted, that it is possible to correct the financial ratios values by means of changing (improvement) the organization financial position rating, if it is calculated. In this case the correction may be exercised by two ways: to adjust the ratio values to the rating desired or to set a desired rating and calculate the financial ratios values basing on that. The outcome of the correction is a change (improvement) of the financial ratios values.
3. Set is an initial condition being a value of the most stable or predictable parameter from the balance sheet and additional information.
4. Solved is a system of equations (1) proceeding from the changed financial ratios valued and the initial condition resulting in the forecast balance sheet and additional information accompanied by the organization financial position improved.
5. Obtained are forecast net cash flows against the items of the balance sheet by a deduction of the initial balance sheet from the forecast one.
6. Done is a data base for the calculations that comprises the forecast net cash flows against the items of the balance sheet and forecast additional information (revenues, sales costs, income, dividends for common stock company, and etc.), cash flows by their economic nature. It should be noted, that the following relationship holds true for the cash flows against the items of the balance sheet:

$$E_i = B_i + I_i - O_i \quad , \tag{1}$$

$$\Delta F_i = E_i - B_i = I_i - O_i , \tag{2}$$

where E_i is a forecast value (at the forecast end) for the i-th item of the balance sheet;

B_i is an initial value (at the forecast beginning) for the i-th item of the balance sheet;

I_i is a forecast cash inflow against the i-th item of the balance sheet (cash inflow) for the time-period;

O_i is a forecast cash outflow against the i-th item of the balance sheet (cash outflow) for the time-period;

ΔF_i is a forecast change of the i-th item of the balance sheet for the time-period (net cash flow).

7. Composed is a system of equations (II) interrelating forecast additional information, forecast net cash flows, as well as cash inflows and outflows against the items of the balance sheet within the simulation of the organization cash flows.
8. Set are initial conditions as a number of unknowns exceeds a number of equations, - values of the most forecast cash inflows and outflows.
9. Solved is a system of equations (II) under the forecast additional information, forecast net cash flows against the items of the balance sheet and initial conditions resulting in the forecast net cash inflows and outflows against the items of the balance sheet.

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10. Aggregated are forecast cash inflows and outflows against the items of the balance sheet and forecast additional information into a unified system of the forecast organization cash flows.The forecast procedure is feasible for any time periods.Thus, the outcome of the overall calculations is the forecast of the organization cash flows (cash inflows and outflows) for the coming time period to correct its financial position for the better. It is presented in the form of a table (Table 5).

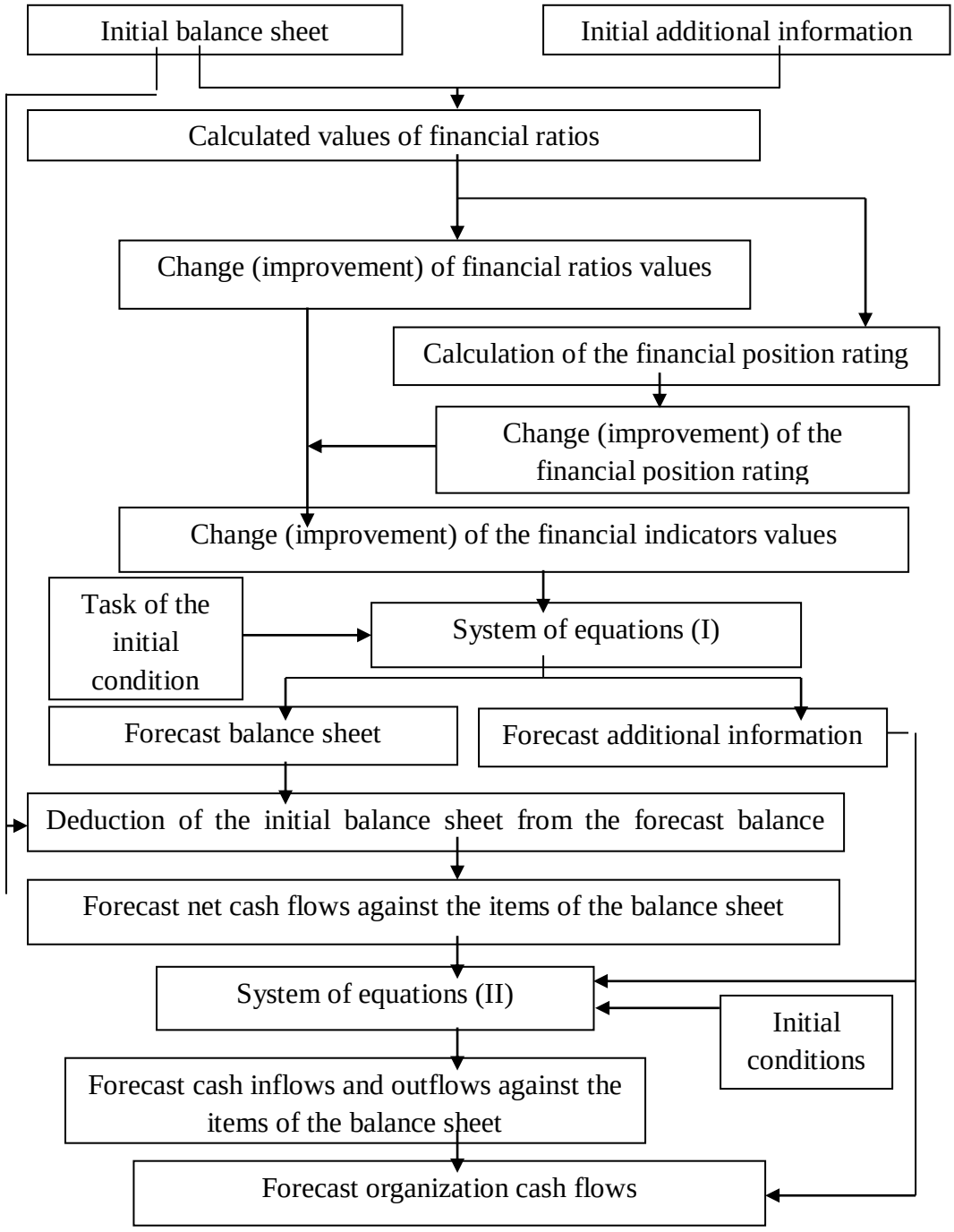

Figure 3. An algorithm block-scheme of the long-term target forecast of the organization cash flows

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Table 5. Forecast Organization Cash Flows

Name of Cash Flow	Value
Intangible assets inflow Intangible assets outflow Fixed assets inflow Fixed assets outflow Raw materials and supplies inflow Raw materials and supplies outflow … Net worth inflow Net worth outflow Indebtedness inflow Indebtedness outflow … Revenues flow Sales income flow Net income flow Tax expense flow Dividend expense flow Dividend flow …	
Total investments: - inflow - outflow Total financing: - inflow - outflow	

In the course of the financial BSC indicators forecast we may develop a few versions of the long-term target forecast of cash flows and a relevant complex of strategic financial events, the most appropriate one in terms of implementation being selected. The ASFA aspects imply proper strategic aspects, tactical aspects and operational aspects.Within a strategic aspect of the applied strategic financial analysis evaluated, diagnosed and forecast are final values of the financial BSC element indicators for the period of the developed strategy in effect, i.e. their strategic values.Within a tactical aspect of the applied strategic financial analysis evaluated, diagnosed and forecast are interim values of the financial BSC element indicators at the year end, i.e. their tactical values.

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Within an operational aspect of the applied strategic financial analysis evaluated, diagnosed and forecast are interim values of the financial BSC element indicators at the end of each month, i.e. their operational values.All the ASFA aspects mentioned are interrelated and agreed: the results of the analysis of the operational financial BSC element indicators values impact on their tactical values and the results of the tactical value analysis impact on the strategic ones.The instruments of the ASFA methods encompass an aggregate of methods ensuring that the analysis is carried out and its goals are attained.The basic ASFA method may include methods of absolute, relative and average values, comparison, grouping, graphical and table methods, correlation and regression analysis, cluster analysis, factoring, as well as expert evaluation method.

Information Base of the Applied Strategic Financial Analysis

The ASFA information base is the financial BSC element, the formation comprising a number of steps.

Definition of the strategic financial goal of the organization activity

The formation of the financial balanced scorecard element indicators commences with the financial managers to define the main strategic financial goal and its particular specific strategic aims basing on the key financial problem in compliance with the strategy adopted and consisting in the following: 'which goals do they have to set in terms of the shareowners' and stockholders' financial expectation?' It should be noted that the process to develop a financial BSC element clarifies strategic financial goals and defines critical parameters of their attainment. Meanwhile, strategic goals comprised in the financial BSC element are peculiar and special for every organization within specific conditions of time and place and cannot be replaced. They enable to transform the financial element of the general strategy, i.e. financial strategy, into a number of specific target statements relevant to the financial BSC element.

In addition, special attention should be paid to the dual nature of the strategic financial goals and their measuring indicators: on the one hand, they define financial results expected from the strategy realization, on the other, they provide the basis of determination of the goals and indicators of other BSC elements.

When defining strategic financial goals it is important to decide which aim to attain: either to recover income or to generate cash flows. If the income is emphasized then the financial indicators measuring the attainment of the strategic financial goals will be based on the income. If the generation of the financial flows is stressed then the financial indicators measuring the attainment of the strategic financial goals will be based on the cash flow. The final decision of the problem taken depends on the environment at the certain organization.

It should be taken into account that the main strategic financial goal could vary depending on the stage of the organization (business cycle) life cycle referring as its company growth, maturity and "yield".

An organization runs through a stage of growth at the very beginning of its life cycle. The organization products and services bear a substantial potential of growth at this stage. To capitalize the potential of interest it is necessary:

- To attract substantial resources with a view to develop and promote new goods and services;
- To construct and expand production facilities;

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- To invest in systems, infrastructure and distribution network;
- To build and develop customer base.

At this stage cash flows could have negative values and investment profitability may be low (the resources are either invested in intangible assets or capitalized for internal purposes). The investment in the future growth may exceed the income the organization generates due to limited volume of its existing customers, goods and services. The main strategic financial goal at this stage of business involves a dynamic growth of sales and income (cash inflow) in the target market segment.

A maturity stage implies that most organizations are still in need of investment and reinvestment, however, the organization has to exhibit superior investments profitability. The organization is assumed to retain its market share and to expand it with every passing year. Unlike long-term investment the investment projects are applied to eliminate difficulties, to expand its production facilities and improve business. The main strategic financial goal at this stage of business development is to gain maximum sales income (net cash flow) and return on investment (outcome net cash flow).

At the "yield" stage the investment implemented at the previous stages generate regular income and the business does not need any extra investment. The investment may be required for the equipment operation and production facilities maintenance rather than for their construction and expansion. The main strategic financial goal of the "yield" stage is to attain maximum cash flow return (or income should it be not understated in terms of tax planning).

Notice, that the main strategic financial goal of each organization life cycle stages considered: those of growth, maturity and yield, could be split into separate, particular strategic financial goals such as:

1. Income growth (cash inflow) and expansion of the operational structure;
2. Costs cut (cash outflow) and rise of productivity;
3. Optimal utilization of the assets and investment;
4. Efficient financial risks management.

The income growth (cash inflow) and expansion of the organization operational structure is reached through the increase of products and services offered, winning new clients and markets, the development of new products and services with a view to create value added meeting price alteration.

The costs cut (cash outflow) and rise of productivity is attained by decreasing direct and indirect costs and the resources utilization mutually with other business units.

The optimal utilization of the assets and investment is featured by the intention to cut

current assets necessary to support the volume and expansion of business, as well as utilize efficiently fixed assets at the expense of the idle resources and divestment of the assets non-justifying their market value. These events facilitate the income growth (cash inflow) due to efficient utilization of the cash and tangible assets.

The efficient management of financial risks is ensured by the business diversification, sources of income (cash inflow) customer base and expansion of geography.

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However, all four strategic financial goals mentioned are characterized by peculiarities of their attainment at the certain stage of the organization life cycle and described by different measuring indicators.

Construction of the strategic financial map

The strategic financial goals are not independent and isolated from each other, visa versa, as it has been mentioned above, they are interrelated having a strong interactive impact. To define and record the cause and effect links between separate strategic financial goals is one of the basic tasks of the financial balanced scorecard element. The cause and effect links defined reflect an availability of the dependence between separate strategic financial goals. During the process an intuitive financial managers insight on the cause and effect availability between separate strategic financial goals are transformed into actual ones and reflected (recorded) in the strategic financial map.

The strategic financial map is viewed as a graph-like document, or a block-scheme, reflecting the cause and effect links between separate strategic financial goals of the organization, the strategic goals are presented as separate blocks and the cause and effect links between them as arrows. The strategic financial map is one of the components of the strategic internal business-processes map and that of the general strategic map respectively.

As an example provided is a strategic financial map reflecting an interrelation of the predetermined strategic financial goals being mostly universal for all types of the organizations (Fig. 4).

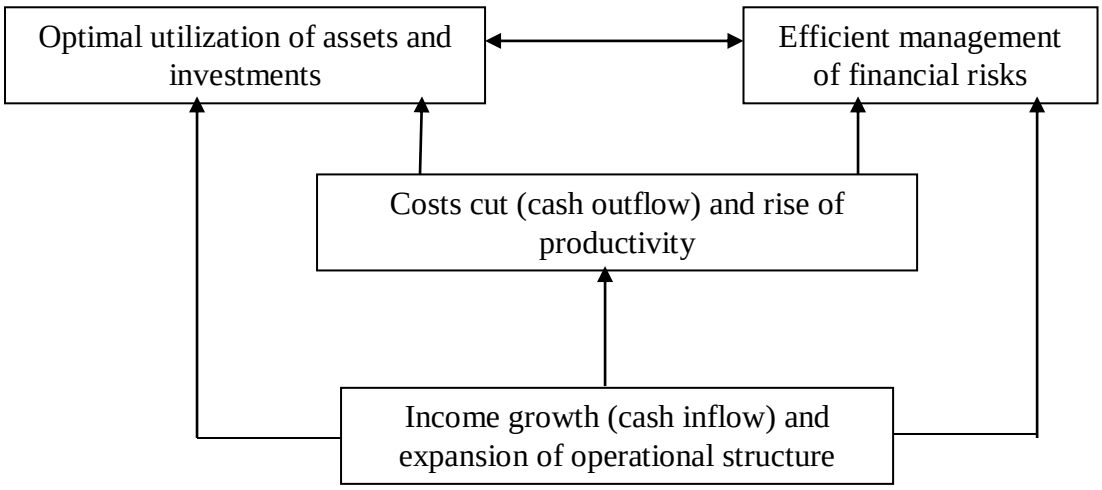

Figure 4. An example of the strategic financial map

The construction of the strategic financial maps to form the financial BSC element is essential as they:

- Reflect interrelated and interactive character between separate strategic financial goals of the organization;
- Explain reciprocal effects emerging from the strategic financial goals implemented;

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- Form executives' awareness of the interaction and importance of the separate strategic financial goals;
- Facilitate a unified understanding of the organization financial strategy;
- Explain the value of the managerial financial indicators;
- Encourage deeper understanding and better ties of the strategic financial goals;
- Assist in building cooperation between the heads of various financial divisions of the organization;
- Create a model explaining the ways to reach a financial success of the organization activity.

Selection of the financial indicators

The construction of the strategic financial map having been completed enables to select indicators of financial balanced scorecard element. The financial indicators are needed to express precisely and unambiguously the content of the strategic financial goals and the level of their achievement. Measuring strategic financial goals facilitates the development of the object managed in the selected financial direction. To ensure the unified understanding of the set strategic financial goals to be achieved each of them should include as many as two (rarely – three and/or four exclusively) indicators.

The consideration of a large number of the estimated financial indicators enables to understand at an early stage which indicators the financial BSC element should encompass. To employ certain financial indicators within a financial management system their description in terms of definition, formulae and parameters is to be available. The existing financial indicators would have to be assessed from the point of their usefulness (e.g. data sources, indicators measurement frequency, target values availability, etc.). As for unavailable financial indicators an accounting procedure of their values should be worked out in advance.

Let us consider, as an example, certain general financial indicators measuring its four strategic financial goals mentioned above (income growth (cash inflow) and expansion of the operational structure; costs cut (cash outflow) and rise of productivity; optimal utilization of the assets and investment; efficient financial risks management) at each three stages of the organization life cycle (growth, maturity and "yield") and bring them together into Table 6.

Table 6. Certain General Indicators of the Financial BSC Element

Stage of the organization life cycle	Strategic financial goal			
	Income growth (cash inflow) and expansion of the operational structure	Costs cut (cash outflow) and rise of productivity	Optimal utilization of the assets and investments	Efficient financial risks management

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Growth	Sales revenue (cash inflow) growth rate. Revenues (cash inflow) from certain goods sales. Revenues (cash inflow) from sales to certain clients. A share of revenues (cash inflow) from new products sales within total sales revenues (cash inflow).	Operational costs growth rate (cash outflow). Sales revenues (cash inflow) and average workforce ratio	Sales revenues (cash inflow) and average operational investment ratio. Total income (total cash inflow) and total assets ratio.	Root-mean-square deviation and sales revenues variance ratio (cash inflow). Root-mean-square deviation and operational costs variance ratio (cash inflow).
Maturity	Net sales (net cash flow) from every kind of product. Net sales (net cash flow) from every client.	Direct costs growth rate (cash outflow caused by direct costs). Indirect costs growth rate (cash outflow caused by indirect costs).	Net sales (net cash flow) and average operational investment ratio. Net income (outcome net cash flow) and overall average assets ratio. Net income (outcome cash flow) and average net worth ratio.	Share of fixed costs in cost of goods sold (share of fixed cash flow in overall outflow caused by operations). Operational leverage effect. Financial leverage effect

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"Yield"	Sales income (net cash flow) growth rate. Net income growth rate (outcome net cash flow).	Item cost growth rate (cost of goods sold). Net sales (net cash flow) and average workforce ratio.	Financial (cash) cycle length. Net sales (net cash flow) and average investment in intellectual and human capital ratio. Share of assets utilized by several divisions of the organization.	Root-mean-square deviation and net sales variance ratio (net cash flow). Root-mean-square deviation and net income variance ratio (outcome net cash inflow).

Definition of the target financial indicators values

Having completed the selection of the financial BSC indicators their target values are to be defined. It should be noted that as soon as the target value of every financial indicator is stated one and another of its strategic goals are considered to be completely described. The target values of the financial indicators are to be rigorous but fully achievable.

The target values of the financial indicators in terms of the methods are determined by means of preliminary development further disputed and agreed at the meetings and combined with building of the business-plan model.

However the following principle has to be obeyed: a balance of the strategic financial goals is to be reflected by the balance of the target values describing them.

Development of the strategic financial events

As soon as the target values definition of the financial BCS element are completed the relevant strategic financial events may be developed. The strategic financial events are assumed as the events relevant to the strategic financial goals determined for the financial balanced scorecard element. The strategic financial events enable to specify the strategic financial goals and link the financial strategy with financial managers' operational objectives. Thereby the key idea of the financial balanced scorecard element is realized, i.e. a transfer of the financial strategy into the specific financial management actions since the financial BSC elements commences operating as soon as the strategic financial events are implemented.

As regards the strategic financial events such operations may encounter as internal investment projects and other events irrelevant to the financial operational activity demanding substantial financial resources. Other events, such as company acquisition or introduction of the divisions budgeting system can be attributed to the group.

The strategic financial events result in the base for the distribution of resources within the financial strategy implementation. In other words, a definition of the strategic financial events implies a comparison of the anticipated strategic financial goals and feasible ones, and the financial resources available. Thereby the organization is being tested for the strategic

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financial goals feasibility. The work may entail a revision of the strategic financial goal defined before the development of the strategic financial events.

As a rule, neither organization owns sufficient financial resources to implement all the strategic financial events considered resulting in setting up priorities. In this case a compliance of the financial events with the strategic system of the financial goals enables to assess available and potential investment projects and programs from the point of view of cash inflows and outflows and their contribution into the implementation of the developed financial strategy. The work facilitates to reach a consensus concerning a sequence of the strategic financial events implementation in terms of financial resources available.

It should be noted, that strategic financial budgets are drawn up basing on the developed strategic financial events. Thereby the strategic financial planning is linked with the operational planning (first and foremost with the budgeting).

The developed financial balanced scorecard element is presented by a table (Table 7).

Table 7. Financial Balanced Scorecard Element of the Organization Development

Key problem of the financial balanced scorecard element	Strategic financial goal	Financial indicator	Target value	Strategic financial event
What goals do they have to set proceeding from the shareowners' and shareholders' financial expectations?				

RESULTS

The applied strategic financial analysis as a kind of the applied strategic analysis is carried out in compliance with the principle of deduction encompassing research firstly general indicators of the financial BSC element then specific ones.

The complex elements of the ASFA are the following:

1. Analysis of the efficient utilization of assets and investments.
2. Analysis of the financial risks.
3. Analysis of the cash flows.
4. Analysis of the income, expenses and profit.

The overall sequence of the applied strategic financial analysis is built on the principle of the analysis mentioned above and its ASFA elements and specified as a block scheme (Figure 5).According to Figure 5 the procedure of the applied strategic financial analysis commences, firstly, from the analysis of the efficient utilization of assets and investments in general, and their separate kinds in particular, as well as accompanying financial risk. We consider the step to be logical within the context of the well-known relationship between risk and profitability. Then analyzed are cash flows generated by the overall organization operations and its separate kinds. Finally, exercised is an analysis of the income, expenses and profits

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connected with the current and other organization's operations as well as certain company products.A more detailed process of the ASFA analysis exercise can be presented through the prism of its main objectives i.e. comparative assessment, diagnostics of the variance and the forecast of the financial BSC element (Fig. 6).

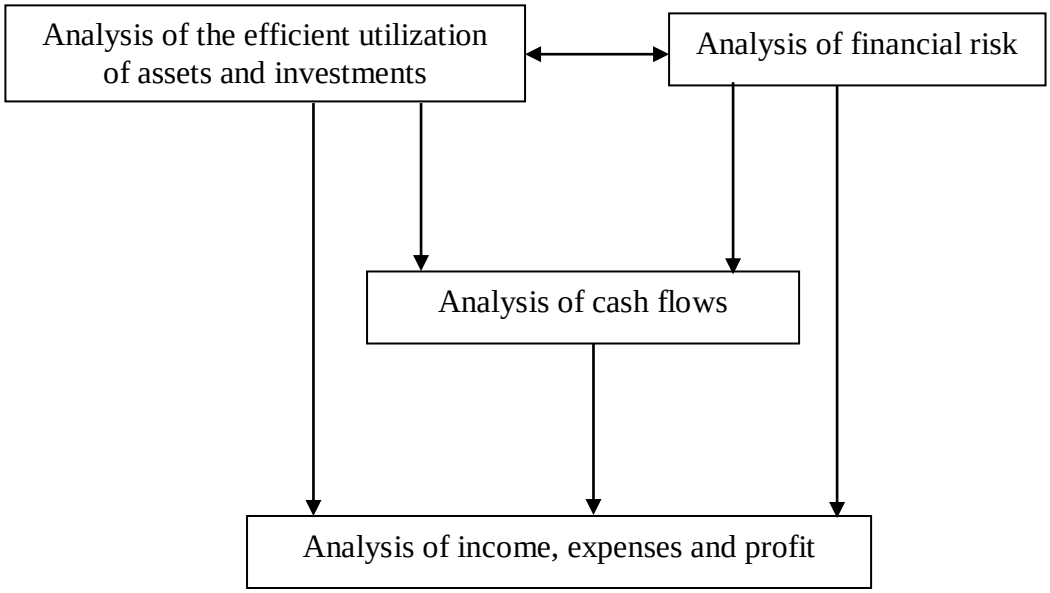

Figure 5. Sequence of the applied strategic financial analysis exercise

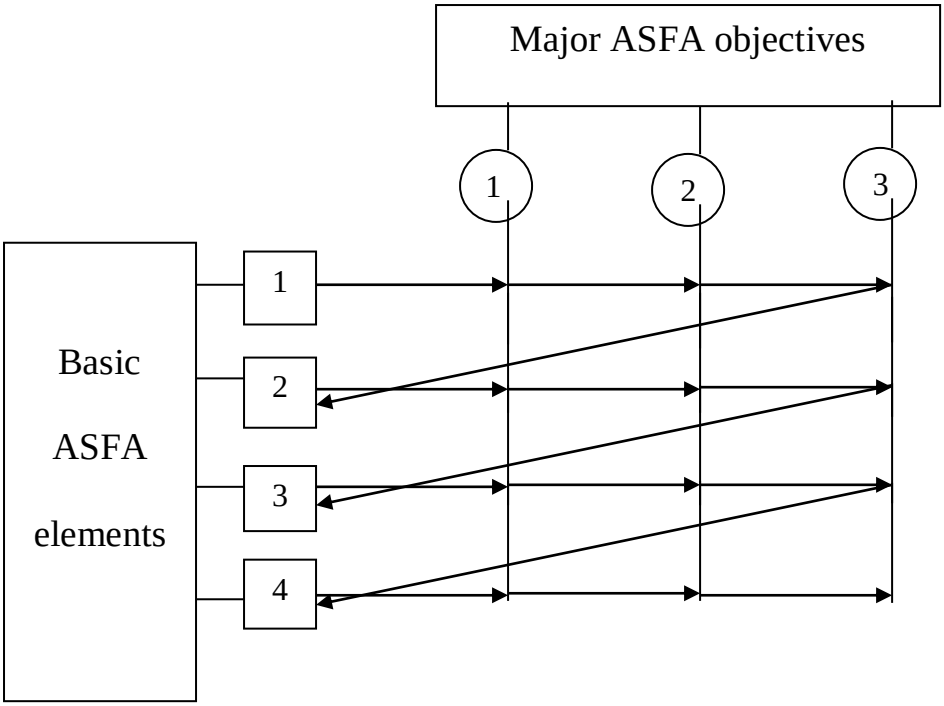

Figure 6. A block scheme to exercise the applied strategic financial analysis

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The figure 6 shows that considering the financial element indicators to be grouped into the outcome and factoring ones the applied strategic financial analysis starts with the comparative assessment of the outcome indicators characterizing an efficient utilization of assets and investments, and is completed with the forecast of the factoring indicators of income, expenses and profit.

In addition, assuming "intersection points" of the analyzed financial BSC element indicators and the most important objectives of the applied strategic financial analysis being defined as some kind of the ASFA elements we are able to build a matrix (Table 8).

Table 8. Matrix of the ASFA Elements

Basic ASFA elements (i)	Major ASFA objectives (j)		
	Comparative assessment of the ASFA financial element indicator BSC (1)	Diagnostics of the financial BSC element indicators variances BSC (2)	Forecast of the innovative BSC element indicators BSC (3)
Analysis of the efficient utilization of assets and investments (1)	Comparative assessment of the efficient utilization of assets and investments indicators	Diagnostics of the efficient utilization of assets and investments indicators variances	Forecast of the efficient utilization of assets and investments indicators
Analysis of the financial risk (2)	. Comparative assessment. of the financial risk indicators	Diagnostics of the financial risk indicators variances	Forecast of the. financial risk indicators
Analysis of the cash flows (3)	. Comparative assessment of the cash flows indicators	Diagnostics of the cash flows indicators variances	Forecast of the cash flows indicators
Analysis of the income, expenses and profit (4)	. Comparative assessment of the income, expenses and profit indicators	Diagnostics of the income, expenses and profit indicators variances	Forecast of the income, expenses and profit indicators

Denoting elements of the matrix as f_{ij} $(i = 1, 2, 3, 4; j = 1, 2, 3)$, enables mathematically describe the ASFA content by means of the formulae:

$$F = \sum_{i=1}^{4} \sum_{j=1}^{3} f_{ij}$$

(3)

Where F is an amount of the ASFA elements;

i *is* an index of the complex ASFA elements: 1 is the analysis of the efficient utilization of assets and investments, 2 is the analysis of the financial risk, 3 is the analysis of the cash flows, 4 is the analysis of the income, expenses and profit.

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j is an index of the basic ASFA objectives: 1 is the index of the comparative assessment of the ASFA financial element indicator, 2 is the index of the diagnostics of the financial BSC element indicators variances, 3 is the forecast of the innovative BSC element indicators.

The author assumes that the introduced matrix (Table 8) and formulae (3) may be considered as matrix and mathematical models of ASFA respectively visualizing their composition and economic contents.

Examples of the outcome and factoring indicators analyzed per every complex ASFA element are provided in Table 9.

Table 9. Examples of the Analyzed Outcome and Factoring Indicators per Every Complex ASFA Element

Basic ASFA elements	Indicators analyzed	
	Outcome	Factoring
1. Analysis of the efficient utilization of assets and investments	Profitability of investment in the current operations against net sales (or net cash flow); Profitability of investment in the intellectual and human capital against net sales (or net cash flow); Profitability of assets against net income (or outcome net cash flow); Profitability of net worth against net income (or outcome net cash flow).	Sales profitability; Net cash flow and sales cash flow ratio; Net income and total income ratio; Outcome net cash flow and total cash inflow ratio; Sales revenues (or cash inflow) and average amount of investment in current operations ratio; Sales revenues (or cash inflow) and average amount of investment in human and intellectual capital ratio; Total income (or outcome cash inflow) and total assets average ratio; Total assets average (or total cash inflow) and average net worth ratio.
2. Analysis of the financial risk	Root-mean-square deviation and net sales (or net cash flow) variance ratio; Root-mean-square deviation and net income (or outcome net cash flow) variance ratio; Operational leverage effect; Financial leverage effect.	Root-mean-square deviation and sales revenues (or cash inflow) variance ratio; Root-mean-square deviation and operational costs (or cash outflow) variance ratio; Root-mean-square deviation and total income (or total cash inflow) variance ratio;

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		Root-mean-square deviation and total expenses (or total cash outflow) variance ratio; Share of fixed costs in cost of goods sold; Share of fixed costs in total costs.
3. Analysis of the cash flows	Outcome net cash flows; Net cash flows of operating. investing and financing activities; Net cash flows from sales of certain products; Net cash flows from sales to certain clients; Net cash flows from sales of new products; Share of net cash flow from sales of new products in net cash flow from operating activity.	Total cash inflow and outflow; Cash inflows and outflows from operating, investing and financing activities; Cash inflows and outflows connected with production and sales of certain products; Cash inflows and outflows connected with production and sales of products to certain clients; Cash inflows and outflows connected with production and sales of new products.
4. Analysis of the income, expenses and profit	Net income; Pretax income; Net sales; Income from certain products sales; Income from sales to certain clients; Income from certain items sales; Income from new products sales; Income from other activities; Net income growth rate and pretax income ratio; Net sales growth rate and pretax income ratio; Sales revenues growth rate and cost of goods sold ratio; Income share from sales of every item in total sales	Total income; Total expenses; Tax expense; Sales revenues; Total cost of goods sold; Sales revenues from certain items; Cost of certain goods sold; Revenues from sales to certain clients; Costs of goods sold to certain clients; Sales price of certain items; Certain items cost; Revenues from sales of new products; Cost of new goods sold; Other income; Other expenses.

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	income; Income share from sales of new products in total sales income; Income share from sales to every client in total sales income; Every product sales income growth rate and total sales income ratio; New product sales income growth rate and total sales income ratio; Income form sales to every client and total sales income ratio.	

CONCLUSIONS

To complete the treatment of the Applied Strategic Financial Analysis concept we draw the following conclusions:

- Applied strategic financial analysis could be considered as a new and sufficiently effective instrument to research strategic aspects of the organization financial activity to form the analytical support of its strategic financial management;
- The ASFA methodological basis is Balanced Scorecard concept and Applied Strategic Analysis, as well as the methodological approach to the target forecast of the organization cash flow coming from its financial position analysis;
- ASFA entails comparative assessment, diagnostics of variances and forecast of the organization financial BSC indicators in terms of its strategic financial goals;
- ASFA encompasses analysis of the efficient utilization of assets and investments, analysis of the financial risks, analysis of the cash flows, and analysis of the income, expenses and profit.
- ASFA analysis commences with comparative evaluation of the outcome indicators characterizing efficient utilization of assets and investments and is finalized with factoring indicators forecast for the income, expenses and profit.
- ASFA results in ability to be employed for the long-term, medium and short-term management decisions in the field of the organization financial activity.

FUTURE RESEARCH

Presented in the article a concept of the applied strategic financial analysis as a new instrument based on the financial BSC element to research strategic aspects of the organization economic activity defines its general contours as a new lead of scientific

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research and practical activity presents some kind of theoretical basis for further ASFA development, and above all, for its practical application.

The following may be considered to be basic trends of the further Applied Strategic Financial Analysis development:

- Further ASFA development assuming its elaboration and specification in terms of certain BSC elements of individual steps and strategic financial goals;
- ASFA methods development for different companies in different industries;
- ASFA spread to include current financial activities, being financial BSC element derivative;
- Simulation and software development to apply ASFA for organization financial activity management.

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