Research of Management Accounting Changes in Lithuanian Business Organizations

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Most of today’s management accounting systems assume that the activity of an organization can be planned for a long-term period and following the planned strategy, goals of organization will be achieved. Nevertheless rapidly changing business environment does not allow planning organization’s activity for a long-term period. As informational and telecommunication technologies, virtual organizations and networks are quickly developing, the constant change of environment stipulates the need to adjust and change strategy of organization in line with the global changes of science, business, technologies, politics and society.

Following the assumptions formulated in the former theoretical researches, the methodology for evaluation of management accounting changes in Lithuanian business organizations was created. The research was performed in order to identify condition of management accounting systems in Lithuanian organizations, determine trends of their development. It also had to clarify changes of adoption and application of management accounting instruments, factors that influenced changes and adequacy of management accounting changes.

The following steps of research were conducted: the analysis of financial, managerial and activity reports and indicators; the analysis of the main events; the analysis of company type dynamics; the analysis of management accounting tools application changes.

It should be mentioned that during the research the main trends of management accounting systems development and changes in Lithuanian business companies were distinguished. They indicated relations among financial results of companies, expectations of shareholders and applicable management accounting tools. The research showed that the type of an organization and the application of management accounting tools depend on the stage of company’s life cycle. The second important aspect was that the application of management accounting tools and their complexity depend on an organization type. The research also validated the assumption that changes of management accounting are directly stipulated by financial results and expectations/objectives of shareholders and management, but not less important is the fact that such component as shareholders’ objectives and hopes should be taken into consideration. Such external factors as situation in the global economy, competition, changes of science, business, technologies, politics, and society are important but are indirect and also influence expectations and financial results of organizations. The last important outcome of research is that rapidity of management accounting changes depends on an organization type.

Taking into account the results of theoretical and empirical research, the trend of the future research was targeted to the development of a reliable balanced management accounting model, which would allow selecting the set of management accounting tools for a particular business organization type and avoiding deficiency or surplus of methods used.

Keywords: management accounting, management accounting tools, changes, business organizations.

Introduction

The issue of creation of management accounting system is relevant and it is always associated with the question how to recognize and evaluate the adequacy of management accounting to business environment and management tendencies, what tools of management accounting can ensure sufficient flexibility and matching to volatile business environment? This question is especially important nowadays when the informational systems, systems of telecommunications and virtual organizations as well as networks are rapidly developing and the permanent change of environment determines the need for adjustment between strategy and local/global changes of science, business, technologies, politics and society. So the main aspects of the relevance of this issue are:

- Need to ensure the strategic view, change management and permanent development by management accounting.
- Implementation of strategy in unstable environment supported by management accounting.
- Insufficiency of ordinary management accounting systems in the context of changes.
- Question what management tools should be applied for different entities performing in different environments.

Level of problem’s exploration. First of all it should be mentioned that the biggest part of scientific studies related to management accounting are concerned with separate tools of management accounting, but only few attempts to identify cause-and-effect relations among types of organizations and tools of management accounting were made.

Further mentioned Lithuanian authors studied management accounting. Gimzauskiene (2005) studied and analyzed issues related to influence of changes (e.g. continuous development, changes of technologies and markets, development of businesses, changes in human resources and customers) to management accounting and highlighted peculiarities of application of management accounting. In 2004 the author analysed Balanced Scorecard,

Two of the most known American scientists who studied and analyzed issues related to strategic management, management accounting and methods of valuation of organizations Kaplan and Norton (1992) provided the model of the Balanced Scorecard composed out of four perspectives that should be measured in order to successfully drive a performance of organization. Australian authors Ifandoudas and Chapman (2004) studied issues related to management theories, management accounting and management. The authors studied combination of Theory of Constraints, Resource Based View and Balanced Scorecard approaches for successful continuous improvement in manufacturing small and medium enterprises. The scientist from Denmark Nørreklit (2000) critically analyzed and contradicted some assumptions of the Balanced Scorecard. It also should be mentioned that the authors of Scotland Carr, Mitchell and Finland - Kolehmainen (2008) studied and discussed the strategic management accounting. The authors provided a contextual framework of strategic management accounting. Americans Horngren, Datar and Foster (2006) analyzed techniques of management accounting. They thoroughly described cost accounting fundamentals, tools and principles of cost accounting, investment decisions as well as management control systems. Authors Yusof & Aziz (2008) analyzed strategic adaptation and value of forecasts. Alas (2008) as well as Markovic (2008) analyzed organizational changes. Finally, it should be mentioned that the author from England Armstrong (2002) discussed the application of the Activity Based Costing and Pavlatos and Paggios (2008) from Greece analyzed the adoption of traditional and recently-developed techniques of management accounting in the hospitality industry of Greece.

According to the reviewed scientific works, it could be stated that the exploration of the issue, i.e. research of features of management accounting in changing business environment and identification of relations among types of organizations and management accounting tools is fragmented. There is no integrated framework encompassing applicable tools of management accounting and types of organizations for which particular tools should be applied (Strumickas & Valanciene, 2007, 2008).

The mentioned level of problem’s exploration stipulates the objective of this paper, which is to continue the research at practical level and identify condition of management accounting systems in Lithuanian organizations as well as determine trends of their development.

The methodology of research. The Case Studies of four business companies were performed by interviewing their experts of management accounting systems and conducting financial and managerial analysis of these companies. It should be noted that research was performed using information for the period from 2004 till 2008. The following steps were conducted during research: analysis of financial, managerial, activity’s reports and indicators; evaluation of the main events; analysis of change of companies’ types; analysis of management accounting tools’ application.

Research method

First of all the theoretical aspects of research will be briefly reviewed. As the theoretical background was prepared during the previous analyses of scientific literature, the following assumptions were formulated, which are subject for the empirical validation:

- The main types of organizations (Market Creators, Refocusers, Value Creators, Restructurers) depend on goals/expectations of shareholders and activity results.
- The change of the type of organization depends on life cycle’s stage.
- Application of instruments of management accounting depends on the type of organization (Strumickas & Valanciene, 2008).

The methodology of the empirical research was based on the particular case studies. Cases of four Lithuanian business organizations (Production Company, Financial Broker Company No. 1, Financial Broker Company No. 2 and Investment Company) were analyzed. The data and information related to these companies was researched as per period from 2004 till 2008. The following steps of research were conducted:

- Analysis of financial, managerial and activity’s reports and indicators. Balance sheets and income statements were examined during the analysis. Dynamics of the main indicator showing the profitability of capital invested and also the financial efficiency – Return on Equity (hereinafter – ROE) was analyzed in comparison with the core events in the local, global economics and within the company.
- Analysis of the main events. The attention should be paid to the fact that events such as acquisitions of/by other companies, establishment of daughter companies, implementing of the new activities were taken into consideration.
- Analysis of company type dynamics. According to the assumptions of theoretical research, companies change types (Market Creator, Refocuser, Value Creator, Restructurer) depending on their life cycle. Changes of organization types were examined for the period from 2004 till 2008.
• Analysis of management accounting tools application changes. The analysis was conducted by interviewing employees, responsible/related to the management accounting. It must be noted that employees (Economists, Director of Financial Planning and Control, Investment Officer) were interviewed by providing them with the list of possible management accounting tools, their descriptions and asking employees to define their usage during the mentioned period. The main categories of management accounting were as follows:

a. Cost accounting. This category includes methods for setting of cost norms, accounting and distributing costs according to cost centers (Absorption Costing, Activity Based Costing, Direct Costing, Standard Costing and Target Costing).

b. Budgeting. These are the methods for preparation of budgets (Incremental budgeting, Zero budgeting, Activity Based Budgeting).

c. Performance evaluation and control. This category includes tools for evaluation of performance of organizations according to such aspects as financial effectiveness, future potential, risk management, identification of deviations from established standards (Financial Indicators, Non-financial Indicators, Variation Analysis, Benchmarking, Balanced Scorecard, Enterprise Risk Management, etc.).

d. Information for decision-making. Such methods are used by companies’ management in order to make investment, procurement, producing, trading and other decisions (Expert Opinion, Product and Customer Profitability Analysis, Costs-Volume-Profit Analysis).

e. Business evaluation, including intellectual capital evaluation. Methods of this group are used in cases of business valuation, mergers and acquisitions, making investment decisions and other management purposes (Skandia “Navigator”, Intellectual Capital Audit, Market-to-book Ratio, Tobin’s q, Book Value, Adjusted Book Value, Income Capitalization, Discounted Earnings, Discounted Cash Flows, Dividend Capitalization, Excess Earnings, Price Earnings Multiple, Sales Multiple, Profit Multiple, Liquidation Value, Replacement Value, Cost to Create, “Rule of Thumb”, Return on Equity).

f. Strategic analysis. The strategic analysis of organization comprises evaluation of many fields as external environment, internal environment, long-term objectives, interests of stakeholders, available resources, etc. This group of methods includes tools for setting long-term objectives of organization and formulating a strategy (PEST Analysis, SWOT Analysis, Five Forces Model, BCG Matrix, Setting of Long-Term Objectives and Long Range Forecasting, Share-Holder Value, Product Life Cycle Analysis, Value Chain Analysis, Activity Based Management, Key Performance Indicators). Synthesizing of particular research stages results. During this stage the correlations of managerial information, financial results, information related to changes in macroeconomics and changes of management accounting tools application were identified.

Results

According to the assumptions of theoretical research the hypotheses were held for empirical research. Further in the paper hypotheses together with results of empirical research will be provided in order to show whether hypotheses were validated or not.

Type of organization depends on its stage of the life cycle. According to theoretical research, company’s type depends on its life cycle stage. Success of a company is mainly related to the getting out of stabilization phase, becoming Value Creator, Restructurer or Refocuser and starting the new life cycle (or the new phase of the life cycle) as Market Creator again. Market creators are strategically oriented young companies, which reach their “blossom” phase and start to stabilize. In order to avoid recession they have to refocus by looking for new business areas or create value by cutting costs, or restructure and avoid bankruptcy as the worst case. So as more business environment is volatile the more frequent repetition of life cycle of a company should be (Strumickas & Valanciene 2008).

The generalized results of empirical research are provided in the Table 1. From this table it could be seen that in most of cases declining ROE, which mainly indicates recession stage of a company, stipulates the change of a company type.

The applicable instruments of management accounting depend on an organization type. As different types of organizations use different sets of management accounting tools, in case of movement from one organization type to another the applicable management accounting tools change. It also could be seen from the Table 1 that in cases of change of company types some management accounting tools started to be used and some were declined. The number of management accounting tools used in different types of companies according to management accounting categories is indicated in the Figure 1. It indicates that Market Creators use the least tools and Value Creators have the most of them on an average. Refocusers and Restructurers are intermediate variants.

Changes of management accounting systems are influenced by the global economic situation, changes of science, business, technologies, politics, society, competition and external regulators of business. It should be mentioned that the main external factor that influenced behavior of business companies was the global financial crisis, which started in 2008. Its impact is obvious because of the deteriorated financial results of companies and negative expectations of their shareholders and management. In combination with the negative financial results, shareholders and management of business companies expected declining results of their entities and started to reject tools of strategic analysis, such as Setting of the Long-Term Objectives, Long-Term Budgeting, etc. and started to strengthen cost control by implementing such tools as Variable Costing. Contrary the area of strategic analysis was developed during the period from 2005 till 2007, hoping that the total consumption will grow. It is obvious that changes of science, technologies, politics, society, competition and other external factors may indirectly influence financial results of companies especially because of globalization processes.
### Table 1

<table>
<thead>
<tr>
<th>No.</th>
<th>Company Type</th>
<th>Year</th>
<th>ROE, %</th>
<th>Overall trend of performance</th>
<th>Trend of expectations</th>
<th>Company Type</th>
<th>New Management Accounting Tools Implemented</th>
<th>Management Accounting Tools Rejected</th>
<th>Main Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Producing Company</td>
<td>2004</td>
<td>63</td>
<td></td>
<td></td>
<td>Value Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2005</td>
<td>45</td>
<td></td>
<td></td>
<td>Value Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2006</td>
<td>10</td>
<td></td>
<td>↑</td>
<td>Value Creator</td>
<td>-</td>
<td>-</td>
<td>The company was acquired</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>5</td>
<td></td>
<td></td>
<td>Value Creator</td>
<td>Value Chain Analysis, Adjusted Book Value, Balanced Scorecard, Activity Based Budgeting, Long-Term Budgeting</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008</td>
<td>N/A</td>
<td></td>
<td>↓</td>
<td>Value Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Financial Broker Company No. 1</td>
<td>2004</td>
<td>38</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2005</td>
<td>12</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2006</td>
<td>-24</td>
<td></td>
<td>↑</td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>-5</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008</td>
<td>N/A</td>
<td></td>
<td>↓</td>
<td>Refocuser</td>
<td>-</td>
<td>-</td>
<td>The company was acquired</td>
</tr>
<tr>
<td>3</td>
<td>Financial Broker Company No. 2</td>
<td>2004</td>
<td>36</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>Analysis of Service and Customer Profitability, Key Performance Indicators</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2005</td>
<td>26</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2006</td>
<td>12</td>
<td></td>
<td>↑</td>
<td>Market Creator</td>
<td>SWOT analysis and setting of the Long-Term objectives, Long-Term Budgeting, Standard Costing</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>6</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008</td>
<td>N/A</td>
<td></td>
<td>↓</td>
<td>Refocuser</td>
<td>Setting of the Long-Term Objectives, Long-Term Budgeting, “Rule of Thumb”</td>
<td>-</td>
<td>The company was acquired</td>
</tr>
<tr>
<td>4</td>
<td>Investment Company</td>
<td>2004</td>
<td>45</td>
<td></td>
<td></td>
<td>Market Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2005</td>
<td>13</td>
<td></td>
<td>↑</td>
<td>Refocuser</td>
<td>PEST, SWOT analysis, 5 forces model, BCG matrix, Long-Term Objectives Setting, Long-Term Planning and the Key Performance Indicators</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2006</td>
<td>37</td>
<td></td>
<td></td>
<td>Value Creator</td>
<td>Long-Term Budgeting</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2007</td>
<td>-1</td>
<td></td>
<td></td>
<td>Value Creator</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2008</td>
<td>N/A</td>
<td></td>
<td>↓</td>
<td>Restructurer</td>
<td>Variable Costing</td>
<td>Long-Term Budgeting, 5 forces model and Setting of Long-Term Objectives</td>
<td>One of the largest companies of the group went bankrupt</td>
</tr>
</tbody>
</table>
Changes of management accounting are influenced by stage of life cycle of organization, goals and expectations of shareholders and managers. The relations between management accounting systems and types of organizations have already been reviewed. Nevertheless management accounting systems depend on expectations and goals of shareholders and management. Such goals may be short-term as maximization of current profitability or long-term as strategic development by acquiring perspective entities, establishing new business units, etc. The empirical research showed that this theoretical assumption is valid as different sets of management accounting tools were used in different stages of life cycle of organizations. Goals and expectations of shareholders and managers had a significant impact as well because particular tools were implemented and declined depending on positive and negative growth expectations.

Changes in management accounting systems are directly related to the results of organizations’ activity. Actually, this issue is closely related to the question of relation between management accounting tools, type of organization and life cycle. As life cycle may mainly be described by the financial results of a company (ROE), the set of management accounting tools also depends on the results of organization’s activity basically indicated by ROE. As ROE increased or diminished, the type of organization and applicable management accounting tools changed (see Table 1).

Trends of management accounting development. Further in the paper management accounting development trends in Lithuanian organizations will be provided. First of all, it should be mentioned that the analyzed period of time (2004-2008) can be divided into two parts: prior and after the global financial crisis:
- From 2004 till 2007, encouraged by expectations related to economy’s growth and improving results of activity, the most of companies were developing such areas of management accounting as strategic analysis and budgeting. The purpose of such changes was the increase of profitability and implementation of strategies, which were developed due to positive expectations of shareholders.
- In 2007 – 2008, threatened by economy’s recession and due to the declining performance, companies started to limit areas of strategic analysis and budgeting. But also the attentions was paid to management accounting tools, allowing better control and analyze expenses (Variable Costing). The aim of such changes was to control and optimize costs of companies.

Conclusions
In the context of management accounting systems’ development in Lithuanian organizations, the following conclusions, summarizing results of theoretical and empirical research, could be provided:
- The type of organization and application of management accounting tools depend on the stage company’s life cycle. This theoretical assumption was based on the classic model of life cycle of organization and was integrated with the framework dividing organizations into four broad categories as well as assignation of management accounting tools to them. Empirical research validated this assumption because business companies changed their types as they moved to recession stage. Actually, in order to receive more reliable results, the higher quantity of companies during the longer period of time should be analyzed in order to get the exact breaking points when a company changes its type and should use a different set of tools.
- The application of management accounting tools and their complexity depend on an organization type. This conclusion was received during the analysis and synthesis of theoretical methods of management accounting, organizational and financial peculiarities of different organizations. This assumption was validated during the empirical research as Market Creators had the least quantity of management accounting tools used and Value Creators had the maximum management accounting tools used. Moreover, Value Creators used more sophisticated tools as Activity Based Costing, Zero Base Budgeting, Activity Based Budgeting, Balanced Scorecard, etc. This
conclusion is strongly related to the previous one because the major and more detailed research is needed in order to get the particular break-even points specifying when companies should use concrete sets of tools. Moreover, the benefit and costs of each tool should be evaluated in order to select the most effective tools.

- Changes of management accounting are directly stipulated by financial results and expectations/objectives of shareholders and management. Results of empirical research validated this conclusion, but not less important is the fact that such component as shareholders’ objectivities and hopes purified through strategic planning should be taken into consideration. Such external factors as situation in the global economy, competition, changes of science, business, technologies, politics, society are important but indirect and influence expectations and financial results of organizations.

- Rapidity of management accounting changes depends on an organization type. Besides theoretical assumptions validation, empirical research indicated that in case of Value Creators, changes in management accounting happen much slower than in the case of Market Creators and other types. It could be explained by much more conservative business strategy of Value Creators and higher capital base of them, which allows responding to internal/external factors much slower.

- Taking into account the results of theoretical and empirical research, the trend of the future research is targeted to the development of reliable balanced management accounting model, which would allow selecting the set of management accounting tools for the particular business organization type and avoiding deficiency or surplus of methods used.

References


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**Valdymo apskaitos pokyčių tyrimas Lietuvos verslo organizacijose**

Santrauka

Didelė dalis verslo organizacijose naudojamų valdymo apskaitos sistemų remiasi priežiūra, kad organizacijos veikla gali būti planuojama ilgą laikotarpį, o organizacijos tikslai bus pasiekti, jei bus veikiamai vadovaujantis gerai parenگę strategija. Tačiau tai yra pasenus rationalus požiūris ir greitai besikeičiančiose verslo aplinkose nėra įmanoma ilgą suplanuoti bendrovo veiklos. Kadangi pasaulio mastų sparčiai pločiamos informacinės ir telekomunikacijų technologijos, virtualios organizacijos ir tinklai, vyksta nuolatiniai mokslai, verslo, technologijų, politikos ir socialiniais pasikeitimais, tai apskaitos pokyčių sąlygoja poreikį keisti ir organizacijos strategią. Viena iš pagrindinių priemonių, padedančių užtikrinti sėkmingą strategijos keitimą ir įgyvendinimą, yra lankstų, tinkamų pokyčių valdyti ir savo laiku vadovėti informuoti valdymo apskaitos sistema.

Valdymo apskaitos sistemų kūrimo problema visuomet buvo aktualūs ir siejamas su klausimais: kaip nustatyti valdymo apskaitos teorinę suplanuoti bendrovės valdymo apskaitos metodai priklauso nuo organizacijos tipo. Pagrindinės tokio pokyčių priežastys yra kitokios veiklos ir jų įpėdės, beveik visai nėra įmanoma įgyvendinti.