Theory and practice of controlling at enterprises in international business

Abstract. The article deals with a modern concept of controlling at enterprises in international business, which contains clarifications of the essence of controlling as a system and detailed consideration by its types: strategic and operational controlling, improvement of their goals, tasks, principles, functions and their relationship to other functions of management. The authors of the article explain how to choose controlling tools which are to be applied at a specific enterprise and suggest a system of controlled performance indicators of an industrial enterprise. A methodical approach to controlling of the export and import activities of enterprises is provided in the article. The authors propose the ways of using the results of controlling related to export and import activities at the enterprise in order to implement business strategies and improving the information systems existing at most industrial enterprises through the creation of the structure of controlling.

Keywords: Modern Concept of Enterprise Controlling; Choice of Controlling Tools; Methodical Approach to Controlling of Export and Import Activities; Results of Controlling; Improvement of Information Systems

JEL Classification: L20; M16; M40
DOI: https://doi.org/10.21003/ea.V165-19
підконтрольних показників діяльності промислового підприємства. Авторами статті розроблено методичний підхід до впровадження контролю експортно-імпортної діяльності підприємства. Визначено логіку використання результатів контролю експортно-імпортної діяльності для вибору основних напрямів реалізації стратегії на підприємстві. Обуріговано шляхи удосконалення інформаційних систем, що існують на переважній більшості промислових підприємств, через впровадження контролю.

Key words: the concept of control, instruments of control; methodological approach to control; improvement of information systems.

Malyarets L. M., Draskovic M., Babenko V., Kochuyeva Z., Doro Vivo A. B.

1. Introduction

Globalisation and integration processes that are taking place in international business, determine the dynamics of changes in the economies of the world. The economies of countries are affected by export and import operations. Recently, foreign economic relations between Ukraine and Montenegro have revived. According to the State Statistics Service of Ukraine, the total turnover between Ukraine and Montenegro in 2016 amounted to USD 6.4 million, including Ukrainian exports - USD 2.72 million (in 2013 it was 4.28 million dollars) and Montenegrin imports - USD 3.26 million (in 2013 it was 2.12 million dollars); the balance amounted to USD 0.54 million (in 2013 it was 2.16 million dollars).

In terms of the structure of Ukrainian exports to Montenegro, the main trading positions are products of oil distillation, oil, sugar, spare parts for machinery, clothing, oilseeds, cardboard and paper products and electrical devices. The main commodity groups of Montenegrin imports are export cars, spare parts for cars, ammunition, beverages and paper products. Despite a fairly advanced legal framework of trade and economic relations (10 bilateral agreements) and enhanced attention from the Embassy of Montenegro to the issues of economic cooperation, the trade turnover between Ukraine and Montenegro decreased from USD 21.34 million to USD 15.94 million in 2016.

The main factors that negatively affect the trade development between Ukraine and Montenegro are the overall decrease in the volume of foreign trade of Ukraine, underestimation of the potential opportunities of the Montenegrin market by the Ukrainian business, non-participation of Ukrainian enterprises in exhibitions in the host country, absence of a joint expert group on economic issues.

Positive factors in this context include a developed legal and contractual framework for trade and economic relations between the two countries, visa-free regime, friendly bilateral relations between Montenegro and the neighbouring countries, the country’s developed transport infrastructure and logistics capabilities, as well as economic zones with preferential tax treatment.

Thus, to strengthen foreign economic relations between Ukraine and other countries, many urgent issues need to be solved, including activities of enterprises in foreign markets and in the international business as a whole. International business transactions carried out by two or more countries that provide greater benefits compared with the case when a country operates within its territory only, than they would have if operating in their own countries only. Such business relations can occur at the level of both private and state enterprises, and their participation in foreign economic activity plays a significant role in raising the economic well-being of the state, improving the living standards of the population and strengthening of the state, which in turn strengthens the requirements for enterprise management systems of countries [1].

2. Brief Literature Review

Problems of controlling are not new, and they are studied by many famous schools of economic thought. Theoretical aspects of the formation and development of controlling, as well as its tools, are covered in the works of such renowned scientists as J. Weber [2], H. Ehrmann [3], O. Karminsky, S. Falko [4], L. Malyarets [5-7], R. Mann, E. Mayer [8], H. Folmut [9], D. Khan [10] and others.

The need to enhance the introduction of controlling at modern industrial enterprises is determined by factors such as a shift of emphasis of past control in the future analysis, growing environmental instability caused both by the global economic and crises in certain countries, a need for continuous monitoring of changes occurring at the enterprise, the complexity of company management which requires precise coordination within the management system and the need to build a special management information system.
3. The purpose of this study is to analyse approaches to improving management systems of companies through the introduction of controlling, which is aimed at improving competitiveness and long-term development of the company under uncertainty and external changes.

4. Results

On the basis of the detailed critical analysis of the existing conceptual approaches to controlling in Ukraine and neighboring countries, developed by scientists and experts, it has been found that controlling is mainly seen as a management function that aims to manage costs and develop the budgeting system, or as a management function that coordinates and regulates and plays a key role in the management of the entity, or as information support of decision-making, or as a management technology aimed at information processing by means of planning, regulation and control of management or as a management component which has self-management and decentralisation as a background [6]. The results of theoretical generalisation and analysis of controlling can be viewed from the perspective of a system which determines the structure and composition of controlling elements; from the perspective of synergies which provide detection and analysis of controlling capabilities as a self-organising system where elements change according to the process of adaptation to the crisis and the unstable state; from the perspective of a process which means the display of implementation of management functions in the process of controlling and from the perspective of a situation with a review of the possibility of controlling by the form of adaptive and regulatory measures with account of time and resources and from the perspective of scientific approaches. This has made it possible to establish that in the present conditions enterprise controlling should be viewed as multi-component management which provides information support, coordination and integration of activities and helps to make rational decisions based on the previously conducted analysis of the current and future state of the company.

As a result of the thorough analysis of problems of theoretical controlling, we propose a conceptual content of controlling of enterprise activity, which is presented in Figure 1. Consequently, controlling functions should include: control of company’s market position in future periods, formation of information and analytical support, inspection of activities based on the analysis of controlled parameters, monitoring of activities; analysis and the assessment of enterprise activity, planning and forecasting of controlled parameters, coordination and integration of components of management and consulting [11-12].

In terms of time, there exists strategic controlling, tactical controlling and operational controlling. However, the practice of controlling at modern enterprises indicates the adequacy of implementation of strategic and operational controlling to ensure the implementation at a particular company.

It is known that there are a lot of tools and techniques of controlling. Nevertheless, it should be noted that today there is no universal tool of controlling. It is believed that benchmarking, potential analysis, SWOT analysis, moderation method, analysis of strategic deviations, system of balanced parameters, strategy maps, system of distribution of indirect costs, standard quality, Six Sigma, policy of open reporting, theory of constraints, scenario development, system of accounting and cost analysis are the tools of strategic controlling which are most adapted to the use at industrial enterprises in modern conditions [13-16].

Taking into account current operating conditions of industrial enterprises, it is the best to use tools of operational controlling such as budget control, bottleneck analysis,
break-even point analysis, ABC analysis, CVP analysis, calculation of amount of cover, management tools of material stock, deviation analysis and calculation of average volume of orders [5; 7; 17-19].

When choosing a controlling tool in terms of a particular company, it is advisable to consider advantages and disadvantages of the existing tools in view of various missions, goals, objectives and strategies. Based on the author's experience on the implementation of controlling at industrial enterprises of Ukraine, the logic of choosing appropriate tools has been defined (Figure 2). The current set of tools of controlling is the basis for the implementation of the subsystem of control which provides correction and improvement. However, almost all tools of controlling involve the use of parameters of the controlled systems and are one of the main analytical tools. If we want the controlled parameters of the system to be effective, it is necessary to follow some principles:

- complexity,
- consistency,
- representativeness,
- credibility,
- comparability,
- informativeness,
- optimality,
- manageability,
- adaptability,
- timeliness,
- clear focus,
- positiveness.

Practical application of controlling at domestic industrial enterprises indicates the feasibility of using a system of controlled activities indicators described in Table 1. Such a system of controlled parameters is the information basis for different methods, use of different tools of controlling and formation of analytical software.

Controlling at enterprises is carried out by stages, the sequence of which should be clear and technological, and for this we should have proper guidelines. Studies on the introduction of controlling at large industrial enterprises in Ukraine demonstrate the feasibility of controlling their export-import activities by using the relevant methodical approach, phases of which are presented in Table 2.

Based on this methodological approach to controlling, the management of export and import activities of the enterprise is provided, wherein a clear coordination of all its functions is given by setting goals, planning and strategy adjustments, controlling the operation of the entire enterprise. The results of controlling at the enterprise are used to develop a control system in general to form and adjust strategies for operation and development of the enterprise. The application of the methodical recommendations on the use of the results

### Tab. 1: Recommended system of controlled parameters of different types of activities at the enterprise

<table>
<thead>
<tr>
<th>Activities</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial activity</td>
<td>Floating assets ratio, turnover stock ratio, turnover debit debt ratio, turnover credit debt ratio, net sales margin, return of equity, return on working capital, return on investments, equity to total assets ratio, working capital financed by equity to total assets ratio, current assets to equity ratio, absolute liquidity ratio, quick ratio, liquidity adequacy ratio</td>
</tr>
<tr>
<td>Production activity</td>
<td>Depreciation of fixed assets ratio, renewal (introduction) of fixed assets ratio, depreciation factor, growth of fixed assets factor, return on assets, capital-labour ratio, capital productivity, profitability of production, share of material costs in total production costs</td>
</tr>
<tr>
<td>Marketing activity</td>
<td>Gross margin ratio, market share, change in sales ratio, bringing the product to the consumer ratio, share of sales costs in the volume of sales, share of new products, shop costs</td>
</tr>
<tr>
<td>HR management activities</td>
<td>Labour productivity, average wage, growth rate of employees, turnover of personnel ratio, turnover of personnel for dismissal ratio, recovery of employees ratio, personnel turnover ratio, cost of working time per employee</td>
</tr>
<tr>
<td>Innovative investing activity</td>
<td>Share of investment in fixed assets in total capital, share of fixed capital investments in equity, share of investment in innovation in total capital investment, share of other innovation costs in total investment costs, share of own investments in technological innovations in the total amount of innovation costs</td>
</tr>
<tr>
<td>Export-import activity</td>
<td>Export quota, import quota, export density of the enterprise in foreign market, profitability of exports, domestic market share, economic efficiency of exports, economic efficiency of imports, profitability of export operations, profitability of imports, change of export supply rate, import changes rate, level of product export diversification, consumer price index (inflation index)</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors
of controlling export and import activities regarding the choice of the main directions of implementation of the strategies was carried out at the industrial enterprises of Kharkiv, namely:

E1 - State Enterprise (SE) «Malyshev Plant»,
E2 - PJSC «Kharkiv Machine Building Plant «Svet Shakhtryora»,
E3 - PJSC «Turboatom»,
E4 - Kharkiv Electrical Engineering Plant «UKRELECTROMASH» (HELZ),
E5 - PJSC «Avtramat»,
E6 - PSC «The Kharkiv Frunze Plant»,
E7 - Kharkiv State Aircraft Manufacturing Company,
E8 - PJSC «HARP»,
E9 - SE KhMP «FED».

The abovementioned enterprises are characterised by different dynamics of indicators of efficiency of export operations (Figure 3a) and profitability of imports (Figure 3b). The export potential of the machine-building enterprises remains weakly diversified and almost exhausted,
and therefore they are not able to ensure stable development of exports in Kharkiv region without new investments and technological changes. Despite this, the enterprises are exporters of various machine-building products to different countries and are potential exporters of turbines, planes, bearings, perforated metal sheets and tractor equipment to Montenegro.

However, an increase in the values of the performance indicators of all activities at these enterprises suggests the expediency of using the proposed methodological principles and observing the logic of using the results of controlling, the content of which is given in Table 3.

The results of controlling of export and import activities can be used to select the main directions of the company's strategy. This allows converting export and import activities of the enterprise into specific indicators of strategic controlling to establish feedback mechanisms linked to evaluation of the

<table>
<thead>
<tr>
<th>Stage name</th>
<th>Stage content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparatory stage of analytical procedures for the selection of strategies for the functioning and development of export and import activities at the enterprise</td>
<td>Analysis of the state export and import activities of the enterprise</td>
</tr>
<tr>
<td>2. Formation of the market profile of the enterprise under the control indicators of export-import activity at the enterprise</td>
<td>Analysis of the efficiency of export and import activities of the enterprise</td>
</tr>
<tr>
<td>3. Determination of key influential factors contributing to the implementation of strategies</td>
<td>Determination of the desired indicators of values of export and import activities of the enterprise</td>
</tr>
<tr>
<td>4. Determination of criteria for choosing strategies for the development of export and import activities at the enterprise</td>
<td>Estimation of deviations of actual and desirable indicators values of export and import activities of the enterprise</td>
</tr>
<tr>
<td>5. Justification of the optimal composition of the development strategies of export and import activities at the enterprise</td>
<td>Construction of a market profile by indicators of export and import activities of the enterprise</td>
</tr>
<tr>
<td></td>
<td>Express analysis of the values of partial strategic discontinuities under the control indicators of export and import activities</td>
</tr>
<tr>
<td></td>
<td>Identification of strategic gaps in indicators for each group.</td>
</tr>
<tr>
<td></td>
<td>Formation of a hierarchical structured list of possible directions of the development strategy of export and import activities of the enterprise</td>
</tr>
<tr>
<td></td>
<td>Adjustment of existing strategies according to the actual conditions of activity; decomposition of strategic goals with the allocation of target benchmarks; identification of reserves for the development of export and import activities of the enterprise</td>
</tr>
</tbody>
</table>

Source: Developed by the authors

Malyarets, L., Draskovic, M., Babenko, V., Kochuyeva, Z., & Dorokhov, O. / Economic Annals-XXI (2017), 165(5-6), 90-96
It should be noted that practical realisation of the proposed theoretical principles and methodical bases for the formation and implementation of controlling in the activities of enterprises, both in Ukraine and Montenegro, has proved its high scientific and practical significance and expediency of further application in the activities of industrial enterprises in different countries.

5. Conclusions

Controlling in international business is an effective administrative tool for improving the efficiency of enterprises’ activities, since it contains a clear structuring of the conceptual content of controlling, the choice of its tools, a scientifically grounded system of partial indicators grouped by types of activity of large machine-building enterprises and the methodical approach to controlling of export and import activities of enterprises. The results of controlling of export and import activities can be used to justify the main strategies of the enterprise and provide ways to improve information systems. The use of the proposed theoretical and methodological approaches to control activities of machine-building enterprises of international business will significantly improve the level of functioning and development of enterprises in different countries.

References


Received 5.06.2017

ORCID and Scopus author profiles

Elsevier’s Scopus is the world’s largest abstract and citation database of peer-reviewed literature and it features smart tools to track, analyze, and visualize research.

When you’ve published an article in any peer-reviewed journal, you automatically have a Scopus profile. It is a good idea to check and update your profile containing the right publications.

ORCID (Open Researcher and Contributor ID) seeks to remedy the systemic name ambiguity problems seen in scholarly research by assigning unique identifiers linkable to an individual’s research output.

You can now update both your Scopus and your ORCID at orcid.scopusfeedback.com.

Please, follow the easy steps on-line.

by Elsevier