

CONTROLLING IN THE SYSTEM OF ECONOMIC SECURITY

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Abstract: Relevance of the research is associated with the importance of implementing an efficient information collection and processing system and making wise managerial decisions based on the obtained data, ensuring the company's economic security. The objective of this paper is: to detail the essence and role of controlling in the system of economic security, to present approaches to building systems of controlling, and to find out difficulties which subjects of economic relations can face when implementing the said system. The leading approach is the concept of controlling as a tool for promptly providing the company's managers with the required valid information for making managerial decisions and the company's ensuring economic security. The paper presents levels of controlling, conditions, and methods of implementing this system; controlling performance methods are described, and organizational structure of controlling is given.

Keywords: economic security, controlling, innovation development, administrative resources, effectiveness of decisions, personnel, organization, management.

1 Introduction

In the era of digital technologies, the most urgent question is the information security system enabling one to store and protect information used for making decisions in all spheres of activity (Strategy of Economic Security of the RF for the Period of Up to 2030, 2017). This is done for protecting the information data from any intervention which can result in loss or distortion of the data.

At the same time, economic security can only be ensured on condition that the information is relevant, clear, and provided to the manager promptly (Sukhodoeva, 2011).

The principal tasks of economic security are as follows: ensuring economic development of region's enterprises in general; forming an optimal structure of the economy and program of its development; ensuring social security and improvement of the population's quality of life, too. Consequently, the method of controlling is only efficient when it is performed at several interrelated levels: the strategic, the tactical, and the operational one. Such an approach enables managers to not only trace down the actual effectiveness of managerial decisions but also perform forecasting and planning. Thus, time is gained, and the quality of managerial decisions is improved (Kornilov, 2010).

Substituting quality control for controlling is a significant mistake most managers make. This is completely unacceptable, just as it is wrong to substitute a system of monitoring measures for controlling to improve employees' quality of work. The principal mission of controlling is to ensure transparency, consistency of decision-making relying on the supplied qualitative and quantitative data, as well as to ensure integrity and confidentiality of the information blocking any third-party access.

Thus, relevance of the research is associated with the fact that in the contemporary political and economic conditions, at the level of the state, regions, and private enterprises, managers have to take care about security systems and to build efficiently working systems for analyzing, controlling, and processing large data arrays which enable them to make efficient decisions relevant to the challenges (Zhiltsova & Sukhodoeva, 2011).

It has to be noted that there are no global Russian studies in the domain of controlling, with foreign theories prevailing in the

scientific community, while Russian experience and particularities of controlling in Russian realia have virtually not been studied. Notably, for a long time, in Russia, economic security has long been associated with physical integrity of property, and controlling – with a system of monitoring, supervision, and inspections. However, the contemporary realia make managers take a new approach to the system of controlling both at enterprises and in the state structures.

2 Literature Review

Proceeding from the Federal Law of the RF "On Security" (2010) and the Strategy of Economic Security of the Russian Federation (2017), one can note that people's life interests are associated with essential needs, and meeting them ensures people's quality of life, their basic existence, and improvement of not only individuals but the society and the state in general. It has to be emphasized that economic needs always underlie personal ones.

L. F. Sukhodoeva (2011, 2012; Sukhodoeva et al., 2016), Yu. V. Zhiltsova (Zhiltsova & Sukhodoeva, 2011), N. D. Sukhodoev (2015), D. V. Sukhodoev (2012) and N. A. Kazakova (2015) discuss using the controlling system both at the regional level (for ensuring the region's economic security), and from the standpoint of ensuring economic security for industrial enterprises, with the regional aspect and area development particularities taken into account.

In his studies, D. V. Sukhodoev (2011a, 2011b) considers the possibility of using the controlling technology in evaluation of the region's resource potential. Importantly, the author discusses controlling of resource provision degree (i.e., provision with not only natural but, first of all, with human resources) as applied for regions of the Russian Federation. Evaluation of the area's resource potential is necessary when investors are making a decision about investing funds into this or that industrial enterprise creation or renovation project.

In their work, V. V. Pogodina and A. Ya. Zakharov (2018, p. 78) pay attention to the fact that at their current development stage, organizations elaborate and implement information systems of performance indicators. A digital concept of development is designed, and there arises the necessity of reinforcing the system of economic security. For organizations, this is a necessary prerequisite for growth, winning the leading positions in the market while maintaining positive development trends. This concept is also discussed in works of D. V. Klimov (2020), M. Ya. Kornilov (2010), and S. N. Maksimov (2018) who explore the mechanism of its fulfillment, the system of indicators, and the necessity of the use of controlling. Meanwhile, it has to be noted that currently, innovation implementation tools are required for the digital economic security system. So, studying the controlling system as a necessary tool for achievement of economic security becomes the priority objective.

3 Research Methodological Framework

The objective of this paper is to demonstrate the essence, meaning, and role of controlling in the system of economic security, to present approaches to building a controlling system and evaluating its effectiveness for the organization.

Tasks of the paper presented are as follows: to describe levels of controlling; to detail controlling performance methods; to show difficulties arising in implementation of controlling both in the state structures and at private enterprises.

Methodological framework of the research consists of general scientific methods, such as analysis, synthesis, analogy, and methods of the empirical level, e.g. observation, secondary data analysis.

4 Results and Discussion

Both at modern enterprises and in the state structures, they frequently face major setbacks in implementation of controlling. The setbacks emerge due to the organization managers' ignoring the paramount stage – planning. Controlling is planned and performed at three levels – strategic, operational, and tactical.

At the strategic level, a number of studies have to be conducted: analysis of the external and internal environment, analysis of vision and mission, goals and values of the organization, with special attention to be paid to critical success factors and the company's unique competitive advantages.

It is important to pinpoint all company's risks, to word alternative variants of decision-making, and to forecast organization development variants depending on changes of the external environment (both macro- and micro-), as well as those of the company's internal environment. To conduct the described analysis, there are some useful methods, e.g. SWOT analysis, GAP analysis, competitive analysis, scenario planning technique, portfolio analysis, potential analysis, and life-cycle curve analysis.

The operational level of controlling is aimed at preparing and presenting to managerial workers the complete current information for them to prepare and make managerial decisions targeted at ensuring the economic efficiency and profitability. At this level, it is important to identify any deviations from the plan in real time. The methods of performing operational controlling are similar to those at the strategic level; additionally, one can use ABC analysis, marginal analysis, function cost analysis, and XYZ analysis.

The tactical level of controlling is for managers to identify ways and methods for eliminating any non-conformities found.

It is essential to apply controlling in financial management, too: owing to this approach, financial discipline and efficiency can be enhanced.

For ensuring the efficiency of enterprises, it is expedient to introduce a position of controller or to organize a controlling service which will not only perform current control of the company's efficiency but also provide analytical materials and databases for its managers to make managerial decisions. It has to be borne in mind that in the contemporary management, all decisions are made on the basis of data and not feelings. So, prompt provision of analytics both about the company's external and the internal environment has to be ensured. Importantly, under such organization, there must be a department with specific functions and a person who is directly responsible for the efficiency of controlling, collecting and presenting analytical information. In organizations, this work has to be built on a consistent basis.

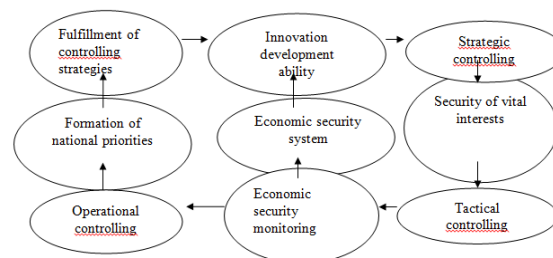
Measures for economic security controlling can be implemented if the following conditions are met:

1. Economic security ensures the shared interest of both managers and subordinates in qualitative economic changes (Sukhodoev, 2012). When fulfilling decisions, each employee must know what for certain controlling measures are needed at the enterprise and must perform his or her tasks at a high-quality level. The results of their work must develop the enterprise's business on a brand new economic basis.
2. The process of controlling has to be formalized in the economic security system. The employees must understand, know, and be able to perform operations of innovation development of their enterprise at a high-quality level (Sukhodoev, 2015).
3. Methods of controlling have to be simple and ensure a high-quality level of activity of the personnel. The employees must not be overloaded with numerous operations: this can cause irritation and psychological tension in the personnel and downgrade the quality of their work.

4. In controlling, motivation of the personnel ensures transparency and interrelation of results and reward. The lack of motivation eats away at the ability of working hard and brings about psychological tension among employees, with the quality of their work declining sharply (Sukhodoev, 2011b).
5. The employees' awareness about tools of controlling contributes to the efficiency of tactical management, as well as the evaluation of results of fulfilling innovation programs and elements thereof.
6. Controlling does not provide for penalty elements because tactical controlling is associated with performing current tasks of ensuring the quality of work and using organizational resources as designed.

This allows departing from formal communication to a constructive dialog on controlling and performance of innovation programs (see Fig. 1).

Figure 1 Controlling in the system of economic security.



Source: author's own processing

In the system of economic security, controlling is a special method for ensuring achievement of the company's development objectives and meeting actual and potential needs of both the company and the state.

The methods of controlling used in information ensuring of security of the state, in particular, of the Russian Federation have to be listed individually:

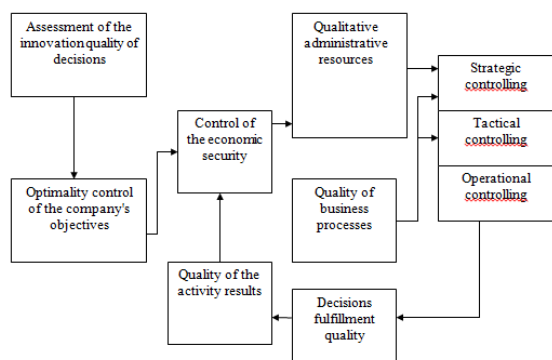
1. Monitoring and analysis of internal and external threats to national security of the Russian Federation;
2. Practical measures for avoiding and countering internal and external threats;
3. Protection of sovereignty of the state, provision of its security;
4. Growth of economic indicators;
5. Overcoming scientific and technical, technological dependence of the Russian Federation on external sources;
6. Guarantee of citizens' personal security, their rights, and liberties.

As for quality of controlling measures, it is expedient to assess their effectiveness using such indicators as unemployment, the state debt, budget, and market share. Some objectives and tasks, for example, innovativeness of goods, cannot be counted in numerical terms. Here, expert's appraisal or effectiveness expressed through qualitative indicators of administrative resources can be used (see Fig. 2). This system relies on such function of controlling as performing individual elements meeting the managers' need of high-quality information resources for the purposes of economic security.

Controlling is used at the regional level, too; it helps obtain information about the area's economic and social development level. Furthermore, it allows coordinating actions of administrations and enterprises and supplying analytical information for investors who are ready to invest into the region's economy. With controlling, potential for the region's economic development can be provided, and its specialization and regional specific profile within the vast Russian economy can be found. The use of controlling also has an important part to play in development of metropolitan cities: convenient life for citizens and uninterrupted functioning of public utilities can only

be ensured when elements of controlling are interrelated at different levels of administration (Kornilov, 2010; Sukhodoeva et al., 2016).

Figure 2 Effectiveness of controlling (broken down to processes)



Source: author's own processing

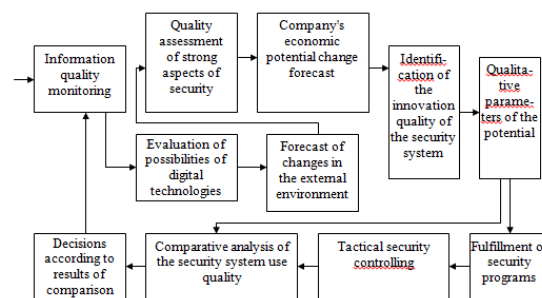
From the standpoint of an enterprise, ensuring its innovation development is vital, and an innovation program cannot be prepared without controlling in place – not only has information to be collected about the global and industry-specific technological changes, but development prospects have to be evaluated, too, for the enterprise's entire macro-environment. In controlling, innovations in the enterprise's development program are tracked down by means of monitoring the economic security system. They are controlled in real time and recorded in tactical controlling reports. Thus, information support of administration in line with any external environment changes is performed.

Results of monitoring will help make wise managerial decisions, identify the organization's weak and strong points, and analyze threats and opportunities held by the external environment for the organization within the context of economic security. To make use of these functions, one has to know the toolkit of controlling (Fig. 3).

It should be emphasized that in controlling, they always use the systemic approach, analyzing not only information but also reliability of its source and the information flow. One should skillfully apply the toolkit for collecting and processing the information and methodology of processing large information volumes, too. In the contemporary conditions of controlling, particularly in the sphere of economic security, specialists face the problem of multiple annual information gain. In such a situation, they start using the system of mathematical data processing increasingly more often. Another problem turning relevant is that of information and personal data protection (Sukhodoeva et al., 2016).

There are also new functions of controlling to be noted. They include finding new information sources, resource provision development, design of innovations, investment control, motivation of market competition, de-monopolization of goods and services markets via the system of controlling (it is used, for example, by Russia's Federal Antimonopoly Service), and regulating business initiatives. These functions started to form only several years ago, owing to extensive development of digital technologies; currently, the said functions have not been in active use yet (Sukhodoeva, 2012).

Figure 3 Model of controlling in the system of economic security



Source: author's own processing

Implementation of controlling into daily practice of Russian enterprises and the state agencies runs into serious obstacles frequently. The very personnel and officials are quite often cautious as for implementation of this system. This is associated with the following circumstances:

1. Standard, established, and habitual processes and models of management used in organizations' daily practice have to be changed. Performance of controlling is perceived by personnel warily, and frequently, employees interpret implementation of this system as an act of mistrust on the part of their organization's managers.
2. In the Russian reality, adaptation of the foreign experience is quite difficult to accomplish. In Russia, personnel management and the human resources management system are not so developed; enterprises do not have a consistently formed system of personnel training and upgrading. Hence, everything new faces employees' mistrust and rejection.
3. The lack of sufficient theoretical knowledge, studies, and literature on controlling has to be noted as well. Many managers and CEOs of enterprises do not know about the theory and methodology of controlling. They underestimate its opportunities and benefits from using it, too.
4. For implementing the system of controlling, costs are implied for the enterprise or budget – to pay for training of the employees and for actual implementation and unfolding of the system. Processes within the enterprise have to be modified, too. All this requires considerable spending, which is not something every organization is prepared for.

However, it is important to highlight development prospects of controlling, too. The future development of controlling will progress toward mathematical data analysis and mathematical modeling, which will allow increasing the precision of analysis and forecasting power of this focus area. Moreover, mathematical analysis and modeling grants an opportunity to reduce financial expenses on financing of controlling. Another promising line is considered to be the development of managerial culture of controlling. In the future, controlling and managerial accounting are expected to converge; managerial accounting is also likely to land in a subordinate position in relation to controlling. Notably, in Russia, it is the state authorities that are leaders in implementation of controlling: the first ones to implement the system were the Ministry of Defense, the Ministry of Foreign Affairs, the Federal Taxation Service, and the Ministry of Internal Affairs. Next, the state corporations followed suit. As for the private sector, at the moment, they seldom implement the system of controlling. However, what also matters is that Russia has already accumulated some experience, and the private business will have to implement this system in the coming years, which is associated with aggravation of external factors for the majority of enterprises. Moreover, in the present-day realia of rapidly changing economic, political, social and technological conditions, organizations (both the state and private ones) find it necessary to respond to the changing realia fast, optimize their managerial policy, and minimize their risks. So, their need of controlling indicators, identifying deviations from the strategy, and understanding causes behind the deviations becomes more urgent. It is the use of controlling that

allows preventing most threats encountered by organizations and ensuring their economic security. Moreover, without a system of controlling in place, the KPI system cannot be built, and adherence to it cannot be monitored. Thus, obviously, controlling performs not only the supervision, accounting function but also allows building the system of indicators organizing efficient work of employees and the enterprise in general, while also ensuring the company's economic security.

5 Conclusion

For the system of controlling to function successfully, it is essential to perform planning and operating this system at the three levels: strategic, operational, and tactical.

It is important to create an organizational structure of controlling in the company; for smaller businesses, introducing a controller's position is sufficient. Meanwhile, for large enterprises, it is expedient to organize a service of controlling for working with large information volumes, controlling the company's indicators, and preparing information based on which the company's managers make managerial decisions.

When preparing and implementing the system of controlling, the following conditions have to be provided. First, employees have to be trained in the control system performance methods, with all the employees to know these methods at that. The personnel motivation and reward system has to be adjusted accordingly. The employees must be kept updated on the company's strategy, strategic objectives and tasks, as well as the current KPI system. Training of the personnel in the theory and practice of controlling has to be provided, too.

The contemporary controlling features such important methods as: monitoring, external and internal threats analysis, competitive analysis, analysis and expert's appraisal of documents. Importantly, the principal function of controlling is collection, processing, and analysis of the information to be provided to managers; it is essential to bear in mind that controlling has no penalty function for employees. It is prompt and efficient processing of information in all the company's work focus areas and its external environment that allows ensuring economic security of the organization. For the state, controlling performs the functions of regulating entrepreneurial activity, developing the economy and social sphere, economic security monitoring, and others.

A system of controlling is considered efficient if the information presented allows making a high-quality, timely, and correct managerial decision.

When implementing a system of controlling, managers face a number of difficulties. Most frequently, the latter are associated with the employees' being not prepared to accept the new system, with the foreign experience being not adapted to the Russian reality enough, and with the managers' not having sufficient knowledge about the system. They may also be unwilling to invest into creating and developing the system of controlling.

Importantly, controlling systems are extensively implemented at the contemporary enterprises and, first of all, within the public administration system. The managerial culture of controlling is developing, too.

Literature:

1. Federal Law "On Security" dated 28/12/2010 No. 390-FZ (latest version). 2010. Available from <http://www.kremlin.ru/acts/bank/32417>
2. Kazakova, N. A.: *The Concept of Controlling of the Region's Economic Security*. Fundamental Research, 11-6, 2015. 1180-1183 pp.
3. Klimov, D. V.: *Trends in Ensuring Economic Security of the Russian Federation at the Current Stage*. In Materials of the 6th International Scientific and Practical Conference (February 19,

2020). Perm: Perm State National Research University, 2020. 258 p.

4. Kornilov, M. Ya.: *Russia's Economic Security: Fundamentals, Theory, and Methodology of Research*. Moscow: Publishing House of Russian Academy of Public Administration (RAGS), 2010. 135 p.

5. Maksimov, S. N.: *Russia's Economic Security: a Systemic and Legal Study*. Moscow: MPSI, MODEK Publishing House, 2018. 56 p.

6. Pogodina, V. V., Zakharov, A. Ya.: *Strategic Controlling in the System of Economic Security*. Journal of Legal and Economic Studies, 4, 2018. 78-82 pp.

7. *Strategy of Economic Security of the RF for the Period of up to 2030*. Decree of the President of the Russian Federation dated May 13, 2017, No. 208. 2017. Available from <http://www.kremlin.ru/acts/bank/41921>

8. Sukhodoev, D. V.: *Approaches to Organizing Strategic Management of Region's Resource Potential*. Russian Journal of Entrepreneurship. Creative Economy Publishing House, 7-1, 2011a. 108-110 pp.

9. Sukhodoev, D. V.: *Focus Areas for Enhancing the Efficiency of Managing Region's Industrial Enterprises*. Today and Tomorrow of Russian Economy, 56, 2012. 163-166 pp.

10. Sukhodoev, D. V.: *Strategic Management of Region's Resource Potential in the Contemporary Russian Economy*. N. Novgorod: Publishing House of Volgo-Vyatskaya Academy of State Service (VVAGS), 2011b. 300 p.

11. Sukhodoev, N. D.: *Economic Attractiveness of Enterprises*. Journal of Economy and Entrepreneurship, 6 (part 2), 2015. 722-725 pp.

12. Sukhodoeva, L. F.: *Formation of the Organizational Potential of Industrial Enterprises in a Metropolitan City: a monograph*. Nizhny Novgorod, Publishing House of N. I. Lobachevsky NNSU, 2012. 148 p.

13. Sukhodoeva, L. F.: *Organizational Attractiveness of Enterprises and Its Evaluation*. Bulletin of Kalashnikov Izhevsk State Technical University, 3, 2011. 70-73 pp.

14. Sukhodoeva, L. F., Grineva, O. M., Sukhodoev, D. V.: *Controlling in the Enterprise Management System*. Innovation Science, 9(21), 2016. 167-169 pp.

15. Zhiltsova, Yu. V., Sukhodoeva, L. F.: *Formation of Regional Development Index in the Modern Russian Economy*. Today and Tomorrow of Russian Economy, 46, 2011. 186-188 pp.

Primary Paper Section: A

Secondary Paper Section: AE, AH