

Local Assessment of the Effectiveness of Internal Audit of a Railway Company in Russia

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Abstract—This article presents the general results of observations related to evaluations of the effectiveness of the internal audit function. These conclusions are made concerning the reasons why there are no grounds for any positive assessment based solely on public data. A general approach to building an internal audit function is considered using the COSO ERM model and the BSC (Balanced Scorecard), adapted for the national railway monopolist company in Russia. In this article, we discuss the possibility of applying the internal audit model proposed in the dissertation of Ox. Goryacheva assessing the effectiveness of a railway company in Russia. The study suggested the development of a common opinion on the possibility of such an assessment.

Keywords— *internal audit; controlling, coso erm, bsc, railways, railway company*

I. INTRODUCTION

The effectiveness of internal audit as a function of ensuring sustainable development has been actively studied in Russia since the end of the last century. The adoption of the Sarbanes-Oxley Act (SOX) in 2002, publications of specialists (for example [1-4] The Dodd-Frank act, preparation of ISO 9000, 7300 standards, development of the COSO model and its subsequent development related to the adoption of COSO ERM 2017 were introduced into the practice of corporate governance in Russia. Declarations proclaimed in response to the world exhibitors 2001, 2008 forced Russian public companies to move towards the unification of the corporate governance architecture using samples recommended by “best practice codes” in the interests of shareholders and beneficiaries. The development of legal structures in the field of organization of internal control was introduced into the Law “On Accounting”.

Corporations formed audit committees and internal control and/or internal audit units. We observed different aspects of the practical application of internal audits in Russia from 2001 to the present, and we can draw some conclusions.

First, in Russia there were practically no cases of bankruptcy related to the unreliability of financial statements.

At least those that would incur substantial losses for a significant number of beneficiaries. Primarily, this is due to the fact that exchange trading in shares was not a principle common practice, and there is still no regional capital market. Conversely, the legal system defined rather strict accounting and financial reporting regulations.

The conservative continental accounting model was traditional for Russia. Business law in Russia was born in the traditions of the German legal family. All actions of the company have a mandatory written form, and are recorded in accounts as operations occur. All elements of financial accounting - accounts, double entry, the rules of registration of documents and registers are regulated by the state. The policy of convergence of accounting standards and the preparation of financial statements under IFRS standards has led to a change in the level of such regulation; almost all of them have shifted from the legislative level to the level of competencies of the corporations themselves.

However, our observations show that these circumstances did not cause any risks of unfair reporting. Although, at the same time, we systematically observed that this statement is often unfair for small to medium-sized enterprises. In our opinion, this is connected to the attraction of exclusive, highly professional accountants in the corporate sector.

Secondly, the general professional impression of the implementation of the internal audit function in Russian companies does not find objective evidence of its effectiveness. One of the reasons for this is the not entirely unambiguous and clear description of the functions of internal audit, including in the ISO and ERM standards.

This causes duplication of the functionality of other corporate services (security services, audit units, inventory

commissions, and others). And if the problem of coordination is solved with adequate management, the problem of understanding the methodology is open. It is not clear how users of public corporate information should understand the effectiveness of internal control and internal audit. Our observations generally reveal the same problems Tim Leech talks about [5]

By Tim J. Leech [5] – Managing Director at Risk Oversight Solutions Inc. “We reference methods that use risk registers as a foundation for their ERM framework as being risk centric. In spite of many denials from the authors/sponsors, I believe COSO’s 2004 ERM framework and ISO 31000 2009 have caused many to believe that these risk registers/risk lists and risk heat maps, largely drawn from simply asking people what they see as the biggest risks to something, qualify, at least for regulatory purposes, as having an effective ERM framework.”

In 2010, Oxana Goryacheva, in her Russian-language book, *Internal Audit*, describes the use of testing through surveys as a non-persuasive method of identification and risk assessment. To set up internal audit functions, it offered optimized corporate governance architecture, qualification requirements for internal auditors, and an object-oriented approach. An object-oriented approach to internal audit suggested linking areas of a balanced scorecard, (BSC), within which KPIs were formed, including established and alternative approaches, assessed in the framework of continuous audit observation.

Thirdly, the use of internal audit as a tool for managing sustainable development and external evaluation of its effectiveness should take into account the specifics of the company. In this study, we were interested in the application of such a concept for a railway company.

In this article, we discuss the possibility of applying the internal audit model proposed in the dissertation of Ox. Goryacheva assessing the effectiveness of a railway company in Russia. The study suggested the development of a common opinion on the possibility of such an assessment.

II. OVERVIEW

In the book «*Audit*», Robert Montgomery described that in the USA, railway companies were among the first to introduce the internal audit function. First, it is due to the companies of this type is geographically dispersed and the exercise of physical control was an important part of the work of auditors. It is essential to ensure the safety of assets, both own and transported. Physical protection of assets is the first task of control.

From the point of view of management theory, we have encountered numerous “translation difficulties” in defining the objectives of internal audit. In their studies of internal audit (2001-2010) Ox. Goryacheva conducts an analysis of approaches to the organization of internal control systems, depending on the prevailing national concepts of commercial law and business practices.

In the continental model of accounting, the traditional form of control is the «inspection board». The audit is based on the

recalculation of the inventory balance and evaluates the effectiveness of the financial and economic activities of the organization.

In the British-American model, the traditional form of control is the audit.

In order to understand the internal audit, we add that in Russia the organizational forms of corporate control are:

- a) audit;
- b) «inspection board»;
- c) inventory;
- d) observation;
- e) verification.

It is the historically established approaches to the economic activities of economic entities and the legal constructions that regulate their activities, including the specifics of accounting and financial reporting that determine the tasks of corporate control.

In her dissertation, Ox.Goryacheva substantiates the need to apply an institutional approach in the study of the internal audit to determine its place and role in an organization. As part of the application of this approach, the concept of "corporate control" is formulated.

“Corporate control” means a management function in an organization with a high level of corporate culture, providing interested users (management, owners and investors) with essential economic information for decision-making.

Corporate control as a system is the interaction of its subjects: management, the audit committee on the board of directors, the audit organization and the internal audit service.

The author proposes to base the standardization of internal audit on the model developed in the thesis, which clarifies the purpose, objects, organizational forms and classical elements of the control method used in the audit; as well as proposed assumptions, functions, directions and specific methods of internal audit (Table 1).

The basis of the internal audit in the corporate control system is its assumptions, which were formulated as a result of the application of the institutional approach in the study (Table 1). The admission of segregation of control functions required clarification of the purpose of the internal audit. In general terms, this means providing interested users with economic information that is essential for making decisions appropriate to their status (or internal audit information). At the same time, the internal audit service provides this information, first to management, which ensures the efficiency of management, and then to the audit committee on the board of directors and external audit.

TABLE I MODEL OF INTERNAL AUDIT (OX.GORYACHEVA, 2007-2010)

Internal Audit Service	Audit Committee
Assumptions about the existence of an internal audit:	
<ul style="list-style-type: none"> ✓ Corporate culture ✓ Control segregation ✓ Authorization of the authority of internal audit entities ✓ Independence of internal audit ✓ The continuity of the internal audit ✓ Competence of internal auditors 	
Objectives of the subjects of the internal audit:	
providing interested users with the essential economic information relevant to their status	
Object-oriented audits:	
<ul style="list-style-type: none"> ✓ Operational audit; ✓ Financial audit; ✓ Direct marketing audit; ✓ Personnel audit; ✓ Audit of additional elements of the MTP) 	<ul style="list-style-type: none"> ✓ Management consulting
Organizational forms of internal audit:	
<ul style="list-style-type: none"> ✓ Audit observation ✓ Auditing 	<ul style="list-style-type: none"> ✓ College
Internal audit functions:	
<ul style="list-style-type: none"> ✓ Audit of the adequacy of the object of control ✓ Audit of the estimated values of the control object ✓ Special audit assignments 	<ul style="list-style-type: none"> ✓ Authorization of internal audit activities ✓ Coordination of interaction of subjects of corporate control ✓ Management consulting
Methods:	
<ul style="list-style-type: none"> ✓ Determination of the real state of the control object, including specific methods of internal audit (aggregation and modeling) ✓ Juxtaposition ✓ Assessment 	<ul style="list-style-type: none"> ✓ Economic analysis

The audit committee coordinates the internal and external audit activities and provides information on the activities of the organization to owners and investors. Model parameters such as the object, directions, forms, functions and methods of the internal audit are based on the considered classifications of corporate control (Figure 1) and internal audit (Figure 2).

A feature of this proposed model is that the objects of control are differentiated according to the elements of a balanced scorecard, and then classified, depending on the tasks to be solved, from systems or subsystems to an indivisible business transaction.

Theoretically balanced scorecard (BSC) contains 4 mandatory elements that have causal relationships with each other: business processes, finance, customers and personnel. This list may be supplemented as part of the strategic planning of the organization. We believe that the elements of the BSC is a convenient system of coordinates in the implementation of control in the form of the internal audit, which determines the direction of its activities regardless of the application of this approach to planning in the organization.

Differentiation of objects of control by elements of BSC allows the internal audit to obtain a wide range of control of economic information about the state of business processes (business processes), the implementation of sales, personnel and financial policies. Obtaining such information is carried out through the conduct of appropriate types of internal audits: operational audit, direct marketing audit, personnel audit, financial audit.

If the organization uses the BSC, the differentiation of the objects of control is simplified, because otherwise there is a need to identify the existing planned performance of the organization. Distribute them among the required elements, highlighting cause-effect relationships. In the case when there are additional elements in the organization (theoretically not more than 6), the specific structure of the internal audit also expands (additional directions appear).

Accumulating the internal audit information about the most significant aspects of an organization’s activities will allow for a comprehensive operational and strategic analysis and, ultimately, not only making timely decisions, but also assessing their quality.

In this proposed internal audit model, classical forms of control are used - observation and verification by a functional unit (internal audit service). At the same time, the audit committee on the board of directors operates in the form of a board.

The need for audit observation is based on the assumption of the continuity of the internal audit activity formulated in the thesis.

Monitoring is carried out on all differentiated objects of control and is carried out in all areas of the internal audit (operational, financial, personnel, direct marketing, an additional element of a balanced scorecard). Obtaining internal audit information occurs through the implementation of the functions in each of them to study the adequacy of the state and performance of objects of control, classified before the indivisible business operations.

The adequacy audit is based on specific methods of internal audit: aggregation and modeling of the controlled object.

The audit of the estimated values is based on the classical methods of operational control: a comparison of the planned indicators of the organization’s activity with the actual ones and an assessment of the identified deviations.

Special audit tasks are carried out as a check and are intended for additional research of objects of control.

A collective decision of the audit committee on the board of directors authorizes the activities of the functional internal audit unit, coordinates the interaction of internal and external audits, and also provides management advice.

The generalization and systematization of the accumulated economic information obtained during the implementation of the internal audit functions will make it possible to identify both the strengths of the organization’s activities and the risks in real time.

III RESULTS

Railway companies have a differentiated geographical location.

In every state, they perform an important social function that characterizes the economic development of the territory. This is confirmed by studies in South Africa [3], China [4], Europe [6] and others.

Companies can be nationalized, for example in Sweden [7] and in Russia or public.

In Russia, railways are nationalized and are natural monopolies. The largest of them, Open Joint Stock Company Russian Railways (JSC Russian Railways) has a sole shareholder - the Russian Federation, on whose behalf of the Russian Federation shareholder powers are exercised by the Government of the Russian Federation. Russian Railways is one of the largest enterprises in Russia.

The mission of such a company is much broader than ensuring the interests of shareholders. In our professional judgment, the company adequately and in accordance with the law discloses corporate information on the Internet.

Corporate information is disclosed on the corporate website of the company and on the website of the independent operator of corporate information, Interfax. Russian Railways issues securities, including those that are publicly available, and demonstrate a commitment to disclosing financial information.

The financial statements of Russian Railways are consolidated as statements of the group of companies of Russian Railways and its subsidiaries and confirmed by an auditor's report. Reports are posted on the company website.

The audit report of Ernst & Yang LLC., on the consolidated statements of the company for 2018 does not contain information on the assessment of the effectiveness of internal audit and other subjects of internal control.

Although an independent auditor is not obliged to evaluate the effectiveness of subjects of internal audit. However, this is a good example of how the cost of maintaining the internal audit apparatus is not clearly correlated with the return on investment in them.

According to publicly available information, the corporate control architecture includes the following subjects:

- «inspection board» (traditional for Russian civil law subject of control over the effectiveness of economic and financial activities);
- Committee of the board of directors for audit, risks and remunerations (according to a different version of the same site - the committee for audit and risks);
- Structural unit of JSC “Russian Railways” - Zheldorkontrol Center for Control and Internal Audit;
- Independent auditor.

In our opinion, such architecture is confirmed by the general conclusions presented at the beginning of the article. This is a question of duplication of functions, which is illustrated by the presence of 2 subjects of control in the company (internal audit and audit).

It is also important to note the issue of the independence of the subjects of corporate control.

The surveyed company declares that “the structure of the audit committee of Russian Railways OJSC does not include persons occupying positions in the management bodies of the

company or its employees”. For other subjects, there are no such statements. At the same time, the company's website states that the internal audit is managed by the executive director, which nevertheless raises doubts about the independence of the internal audit.

IV. CONCLUSION

In general, the policy of informational openness on the example of this company allows seeing the imperfections of the system; established, first of all, by not completely unambiguous standards.

This indirectly confirms the view that the effectiveness of the internal audit function is not obvious due to the lack of information and the ambiguity of the tasks that could be measured using KPI, and brings the internal audit as a controlling tool in their achievement.

A simplified model of internal audit for the railway company's activities can be represented as follows:

TABLE II. SIMPLIFIED MODEL FOR EVALUATING THE EFFECTIVENESS OF THE INTERNAL AUDIT OF A RAILWAY COMPANY

Element BSC	Customers		Staff	
Kind of Activity	Passenger Transport	Freight Transport	Passenger Transport	Freight Transport
KPI	KPI _i	KPI _i	KPI _j	KPI _j
ERM	Risk _i	Risk _i	Risk _j	Risk _j
Element BSC	Business Process		Finance	
Kind of Activity	Passenger Transport	Freight Transport	Passenger Transport	Passenger Transport
KPI	KPI _k	KPI _k	KPI _l	KPI _k
ERM	Risk _k	Risk _k	Risk _l	Risk _l

The simplified model is convenient for cloning in relation to the relevant objectives of the company and the organization of continuous audit observation, where the research will be specific elements of the MTP and certain (and alternative) KPIs, including the risk assessment for each of them.

Acknowledgment

This team was united to discuss the theoretical possibility of such research and their application in practice. We believe that our conclusions made almost 10 years ago are still valid and can be taken into account by experts.

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References

- [1] DiPiazza Jr, A. Samuel, and G. E. Robert, Building public trust: The future of corporate reporting John Wiley & Sons, 2002.
- [2] P. Purpura, Security and Loss Prevention (Seventh Edition) Elsevier, 2019.
- [3] M. Eulerich, J. Kremin, and D. A. Wood. "Factors that influence the perceived use of the internal audit function's work by executive management and audit committee." *Advances in Accounting*, 2019.

- [4] Ji, Xu-dong, Wei Lu, and Wen Qu. "Internal control risk and audit fees: Evidence from China." *Journal of Contemporary Accounting & Economics* vol 14, no.3, pp 266-287, 2018.
- [5] T. J. Leech "Why should boards around the world care about the 200-page US guidance? The answer might surprise you" COSO ERM 2017
- [6] A.S.J. Smith, V. Benedetto, and C. Nash. "The impact of economic regulation on the efficiency of European railway systems." *Journal of Transport Economics and Policy (JTEP)* vol, 52.2 Pp.113-136, 2018 ISSN 0022-5258
- [7] K.. Odolinski, *Reforming a publicly owned monopoly: costs and incentives in railway maintenance*, Diss. Örebro university, 2015