Abstract: This paper aims at improving the internal control systems of universities in Romania. The study is based on data from the literature on the implementation status of internal control in public sector universities. It analyzes the requirements of national regulations on internal control systems for public institutions and the requirements for quality assurance in higher education. The analysis concludes with the presentation of the major axes of action to increase the effectiveness of internal control and management quality.

Key words: internal control system, quality management in university, enterprise risk management.

1. Introduction

Basic concepts

In a semantic sense, control is the measurement process and analysis of an activity in order to track its progress and improve it. Within organizations, achieving control is associated with management and involves the implementation of control systems appropriate to the organization, in order to measure the performances and regulation of the activity.

The complexity of control systems has increased with the evolution of management: at present, control in management is achieved both hierarchically and by specialized structures that deal with various sides of the activity: economic and financial aspects, quality, employees' performance, infrastructure, etc. Each of these areas requires specific control structures and methods, usually addressed separately in the theory and practice of management [1]. Currently there is a concern for the implementation of integrated control systems, focused on management processes and risks which may affect the organization activity.

In connection with this approach, the collocation "internal control/management system" (ICS) is being used, which is associated with various definitions: "management tool used to provide reasonable assurance that management objectives are met" [2], "a process effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: 1) Effectiveness and efficiency of operations; 2) Reliability of financial reporting; 3) Compliance with applicable laws and regulations. [3] The conceptual development of the general
framework for internal control is rooted in the guide "Internal Control - Integrated Framework" [3], published in 1992 by the Committee for Sponsoring Organizations of the Treadway Commission, known as COSO. The "Enterprise Risk Management - Integrated Framework" Guide [4], published in 2004, emphasizes the systematic approach to risk management, defined as part of ICS. These documents were the basis for establishing guidelines for "Internal control standards for the public sector", developed by the International Organization of Supreme Audit Institutions (INTOSAI). INTOSAI guidelines for internal control standards in the public sector are part of INTOSAI GOV - Guidance for Good Governance.

Achieving control in public organizations has become an imperative aspect in the current context, as stated in the policies pursued by the European Union (EU) since 2004. The usage of common rules for the development of ICS in the EU member states encourages communication between organizations and nations, and provides reasonable assurance that the assets are protected, that the financial reporting is reliable and the financial operations comply with ethics. However, it is possible to analyze how public organizations are governed, so the European Commission for the management, coordination and implementation of ICS was created for this purpose. [5]

In Romania, the legal framework and methodology for the implementation of internal control/management was created before Romania joined the EU: The Minister Order for the approval of internal control no. 946/2005 [6] stipulates the obligation of public institutions to implement ICS and presents the internal control standards. As of 2011, structures have been created for monitoring ICS [7], which is accomplished through quarterly reports. These regulations are mandatory for all public institutions, including universities.

**Prior work on ICS in universities**

ICS implementation and risk management in universities is based on the specific regulations of each state. The requirements are reflected in various documents on control methods and reports. In the United States (US), documents are usually published on university websites. Their analysis reveals the extent to which internal control is integrated in university management, but such analysis is not sufficient to draw conclusions about the ICS effectiveness. A recent US study [8], conducted by the Association of Governing Boards of Universities and Colleges and United Educators reports data on attitudes, practices, and policies regarding enterprise risk management. The survey revealed that the risk management approach was not fully integrated in the US higher education institutions: less than a quarter of the respondents (23.6%) “mostly agreed” that board members and senior administrators use monitoring activities to determine the effectiveness of institutional risk management activities; a majority (60.1%) of respondents reported that their institutions do not identify major risks to institutional mission success through comprehensive, strategic risk assessments; half of the respondents (50.8%) reported that board members and senior administrators at their institutions evaluated major risks identified by strategic risk assessment only “as needed”.

A few concurrent studies attempt to address the state of ICS in European countries, and are focused on effects of reform in the internal control of the business domain [9]. A compendium has been developed recently [10] that includes an indication of the standards (international or national) applied in 27 countries. The study reveals large
differences in the approach: many of the countries have internal control systems that are established within public entities clearly spelled out in the legal basis of these entities, in some other countries, internal control is not explicitly mentioned, but a clear framework for the internal control of institutions has been created within existing rules and regulations or specific laws. For most countries with an explicitly decentralised internal control system, risk management is also a mandatory requirement for public management; a few countries, on the other hand, do not explicitly mention risk assessments at all as part of their internal control arrangements.

**Study objectives**

Given the difficulties in applying the rules on internal control within Romanian universities, the paper aims to clarify the requirements and to identify key issues to improve the ICS effectiveness and efficiency. The specific objectives of the study are: 1) the analysis of Romanian regulations on ICS for public institutions and highlighting correlations associated with quality management requirements in universities; 2) the establishment of major axes to improve the university’s ICS.

**Research methodology**

The methodology of the study consists in a systematic analysis of the relationship between internal control and quality management processes within universities, from regulations perspectives, and a case study approach. The national regulations and related literature are extensively reviewed to achieve the paper objectives.

2. Internal control and Quality management in universities – comparative analysis

National regulations on internal control [6], [7] present a generic model for ICS, with requirements applicable to any organization. Implementing this model in universities primarily meant the establishment of structures for ICS coordination and evaluation. There were developed and implemented analysis tools (checklists, risk register, reporting forms), which aimed at the requirements for control and risk management activities. The ICS model includes 25 standards/requirements, ranked on five levels, namely: 1) Control environment, 2) Performance and risk management, 3) Information and Communication, 4) Control activities, 5) Audit and evaluation. Each of the five elements has several criteria and specific standards, harmonized with the requirements of European guidelines.

Achieving the requirements defined by the 25 standards involves management actions resulting in documents that describe the processes (procedures) and organizational structure, strategies, operational plans and other working documents. For example: Standard 2 - Attributions, functions, tasks, and Standard 6 – Structure, refer to the regulation of employees’ roles, their presentation through job description and the knowledge of their duties and responsibilities by employees; Standard 17 – Procedures, emphasizes the need for describing the way of working and using a proper documentation for any action or significant event. The existence of these documents, complying with requirements, is the evidence that the internal control standards are being met. At the same time, the issues listed before are criteria for assessing the quality of the university. The list could go on with other examples of the ICS requirements whose application is confined to education quality concerns.

It is known that quality assurance in education is a central axis of the university management, whose performance is governed by specific models. In the Romanian higher education, the reference
model for the quality management system (QMS) is represented by the standards and guidelines developed by the Romanian Agency for Quality Assurance in Higher Education (ARACIS), the national structure for external quality assessment in higher education [11].

Currently, quality assurance in education and internal control are addressed separately, and structures and specific instruments have been created for each of them. This way of coordinating the two systems can generate confusion, caused by mismatching the requirements regarding the activities and documents that have been used. The relation analysis between ICS and QMS in universities, further developed, may be useful to avoid such failure. The analysis highlights the common elements of both systems and their differences.

<table>
<thead>
<tr>
<th>Item no.</th>
<th>Key elements</th>
<th>QMS and ICS Similarities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purpose</td>
<td>Satisfaction of stakeholders, internal and external regulations</td>
</tr>
<tr>
<td>2</td>
<td>The issues addressed</td>
<td>Management processes and business risks that may affect the organization</td>
</tr>
<tr>
<td>3</td>
<td>Results</td>
<td>Providing confidence, reducing losses</td>
</tr>
<tr>
<td>4</td>
<td>Coverage</td>
<td>The whole organization, relevant functions and processes</td>
</tr>
<tr>
<td>5</td>
<td>Mode of action</td>
<td>Systematic, planned actions</td>
</tr>
<tr>
<td>6</td>
<td>Principles</td>
<td>Approach as system, Leadership, Staff involvement</td>
</tr>
<tr>
<td>7</td>
<td>Structure</td>
<td>Specialized structures, professional approach</td>
</tr>
<tr>
<td>8</td>
<td>System description</td>
<td>Documented system (procedures, work records and other documents)</td>
</tr>
<tr>
<td>9</td>
<td>Compliance with the requirements</td>
<td>Audit actions</td>
</tr>
<tr>
<td>10</td>
<td>System evaluation</td>
<td>Internal and external evaluation</td>
</tr>
</tbody>
</table>

The similarities between ICS and QMS are summarized in Table 1. Note that: both systems cover the entire organization and are aimed at reducing losses and meeting the requirements better; both systems promote staff involvement, leadership and other principles of modern management, and integrate structures of internal audit, etc. The coverage and the way they work are different, however. Thus:

- ICS is focused on control; the quality management approach is complex, includes planning, control and quality improvement.
- The main materialization of quality control in higher education refers to measuring satisfaction, process quality monitoring, institutional and study programs assessment. ICS looks on how to make control processes in order to meet the objectives and also the manner of management processes. The accuracy of data recording in the books is emphasized, as well as the lawfulness of transactions, etc., but the approach is not limited to traditional optical financial control, as it includes the integrated control concept, underlining the importance of non-financial information.
- Methodologies for assessing institutional/study programs include some of the requirements of ICS standards relating to the organizational structure, working procedures and control, ethics and integrity, etc. The requirements for ICS (the 25 standards) are defined rigorously. For example, by looking at the organizational structure, one can observe that there are additional requirements, for the segregation of
duties, delegation of tasks and sensitive jobs. The inclusion of these requirements in the standards for internal control is based on best practices and was done to prevent possible errors and fraud.

- Internal audit processes have an important role in quality management and they aim at checking QMS compliance with the reference standards and with the internal documents/procedures. ICS integrates the internal audit processes, conducted by independent university structures, subordinated to the Ministry of Finance. Their role, established by law [12], is to give security and management advice for the proper administration of public revenues and expenditures perfecting the operations of the public entity; to help meet their targets through a systematic and methodical approach, which evaluates and improves efficiency and effectiveness of management, based on risk management and administration process.

- Both quality management and internal control promote the principle of risk prevention. The whole philosophy of quality management is based on reducing the risk of non-compliance/deviations from requirements. Thus, QMS integrates mechanisms and tools to improve performances through preventive action. According to ISO 9000:2006, preventive actions are those actions that eliminate the causes of potential noncompliance or other possible undesirable situations. Although the risk approach is not an explicit requirement in the models for quality assurance in education, risk identification is made in both universities and academics in the periodic assessment: Self-assessment reports include internal and external environment analysis (SWOT analysis), highlighting the dangers caused by the external environment and underlying improvement plans. In the ICS regulations, risk management is one of the requirements (Standard 11): by introducing it in the internal control standard code, implementing risk management in Romanian institutions has become mandatory.

Methodological aspects on risk approach in public institutions are found in the Code of internal control, and Methodology to implement of ICS Standard “Risk Management” [13], developed in 2007. In accordance with the law, Romanian universities have implemented risk management by:

- Defining Risk Officers at the university level and for each department;
- Regulating the risk management process by means of procedures and by creating tools and specific forms (register risk assessment questionnaires / checklists, reports).

Without being exhaustive, the above analysis highlights that the risk management and internal control are two complementary systems, with many common elements. Some proposals for improvement are given below.

3. Conclusion

ICS has been developed as a commonly known concept that is widely used. ICS has become an integral and vital part of a modern governance system. Therefore, ICS implementation is necessary, and is part of the administration reform required and monitored by EU bodies.

Despite the fact that many internal controls are a simple matter of common sense, the regular use of checklists to review the control processes can be a valuable tool in the control process and help identify errors. But, in our opinion, not all requirements are justified, and standards system should be redefined to eliminate redundancy and ambiguity.
It is important, now more than ever, for universities to develop and maintain a holistic risk management program in order to ensure the same overall goal: to protect the organization and ensure its survival to the benefit of its stakeholders. Approaches of quality assessment are not sufficient in this respect. As the analysis of the literature shows, the problem is often solved formally; to overcome this situation, it is important to prepare board members, heads of departments and others involved regarding risk management. The development of national actions and guidelines for risk management in universities is also possible, because the major risks in higher education are basically the same.

Another idea for improvement is based on the many links between ICS and quality assurance, outlined in §2: some considerations on integrating risk and quality management systems were developed by the authors in a previous paper. [14]

In conclusion, the paper creates a general framework for improving ICS’s structure and tools in universities. The major axes of future studies are: defining a model of the university’s risk factors; developing the risk management tools for internal control in universities.

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