THE INTERDEPENDENCE BETWEEN THE TRILOGY RISK-COST-VALUE AND INTERNAL CONTROL

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Abstract
Our article analyzes the active role of internal control amongst managerial tools and develops its importance in establishing the balance between risk, costs and value, considered as three efficiency pillars at the institutional level. From a conceptual point of view, we investigate the interdependencies between the three pillars and debate on possible influences they may have on the achievement of organizational targets. The methodology used starts from the conceptual definition of the evaluated terms and is based on an empirical analysis of the herein notions. The study highlights trends regarding the attitude for risk management during the implementation of internal control and proposes a shortlist of checkpoints that supports the achievement of risk-cost-value balance trilogy.

Keywords
Internal control, risk management, cost, value.

JEL Classification
G30, M40, O16

Introduction

The starting point of this research resides in the current economic context and the resonance that corporate governance has on public entities. According to literature, corporate governance has been analyzed from various perspectives, both conceptually and empirically. Cross listed firms seem to be more likely to comply with corporate regulations when they need external funding, unlike when coming from countries with weak corporate governance rules. (Foley, C. F. et al., 2014). The interdependencies between corporate governance and internal audit have been investigated related to the role of the internal auditor (Koutoupis, A.G. et al., 2018), the validity of financial reporting (Gamayuni, R., 2018) and the contribution that the internal auditor may have in achieving the organizational goals (Koutoupis A.G., 2018).

On the other hand, the implementation of internal control as part of the corporate mechanism has been analyzed in correlation with "hard law" or "soft law" conditions (Aguilera et al., 2008).

Weaknesses of internal control can become determining factors for fraud (Zakaria et al., 2016), and the sustainability of entities can be enhanced through awareness of the accounting centralized position within the entity (Narayan, A.K., 2014) and use of tax principles in financial reporting (Graham et al., 2010).
The relationship between risk management and firm-value was developed according to literature, by various studies such as those on non-financial UK companies (Panaretou, A., 2013), as well as theoretical analyzes such as the evaluation of various institutional influences in emerging markets (Danisman et al., 2019).
Werner (2005) has stated that each value-based management needs risk management, just as the cost of capital is determined by the level of risk accepted. Until now, we have not identified an intrinsic analysis of the interdependencies between the risk-cost-value trilogy and the patrimonial management of public entities in the development of academic literature.
Our work is part of the scientific approach to corporate governance in the public sector and highlights the contribution of internal control to ensuring the performance of public entities. In this context, the paper demonstrates the capacity of internal control to contribute to creating added value in the process of achieving public entity goals, optimizing resource consumption and streamlining risk management mechanisms. In this respect, we propose a shortlist of supporting questions that can bring value to the implementation of the public-sector risk-cost-benefit balance trilogy.
Internal control is the responsibility of the public entity's manager, who has the obligation to design, implement and develop it continuously. Assigning third parties to carry out the activities related to the implementation and development of the system of internal management control of the public entity may not reside as a good reference, as it implies that the leader of the public manager does not fulfill his own tasks with good results.(Order no. 600, 2018)

European and national regulatory framework
The European regulatory framework, considered relevant for our study, incorporates:
- Decision no. 2 / 18.03.2004 of the European Court of Auditors (ECA) on the model of "single audit (and a proposal for a Community internal control framework)", which basically has a control system that must be based on a chain structure and which must achieve results that are recorded and communicated in a common form;
- Guide for a Good Governance, developed by the Standards Committee for Internal Control – INTOSAI GOV (The International Organization of Supreme Audit Institutions);
- The Yellow Paper of the European Commission entitled "Welcome to the CFPI World" - 2006, the European Commission.

European regulations regarding the implementation of internal control mechanisms have developed in close agreement with the awareness of their importance in the fight against fraud and corruption. In Romania, the legislation has undergone a broad progress in sense of reconciliation with the European requirements by adopting the following normative acts:
- Government Emergency Ordinance no.119/1999 on internal control and preventive financial control, republished and updated;
- Law no.672/2002 on the internal public audit, republished in 2011 and updated;
- Emergency Ordinance no.109/2011 on corporate governance of public enterprises, updated;
- Order of the Ministry of Public Finance no.946/2005 for the approval of the internal / managerial control, including the internal / managerial control standards in public entities and for the development of the internal / managerial control systems - repealed by OMFP 808/2015;

▪ Order no.400/2015 for the approval of the Managerial Internal Control Code of Public Entities, repealed;
▪ Order no.600/2018 on the approval of the Code of Managerial Internal Control of Public Entities.

Methodology

Our paper starts from the research question: How could the risk-cost-value balance trilogy be pursued for the implementation of a viable internal control system?
The proposed methodological approach is an empirical one, starting from literature studies circumscribed to the research area, as well as qualitative analyzes of the existing relevant international and national regulatory framework. The methodology also incorporates statistical data reported by the Court of Accounts of Romania during the period 2008-2017, which allows the quantification of the non-conformities reported by the external public auditors regarding the financial results of the audited entities. The reason behind the value-based analysis of public sector nonconformities is that in order to gain relevance, it is important to quantify the impact that a possible imbalance between the analyzed trilogy might have on the performance of results of the entity.
In order to accomplish the proposed research objectives, it was necessary to systematize a significant amount of managerial, legislative and conceptual information.

Components of the internal control system

For the assessment of the internal control system we need to define that the six independent recommended components apply to all operations of an entity:

- Control environment
- Risk assessment and measurement
- Control activities
- Information and communication
- Monitoring
- Use of IT

The control environment is the foundation for all the other components of internal control. It is an effective tool in preventing corruption and fraud. Through its mechanisms it ensures discipline within the organization and a structural framework of the entity meant to define the overall quality of internal control.

Fig. no. 1 Control Environment Elements - Preventing Corruption and Fraud
Source: Authors' work

Risk assessment involves the identification and analysis of risks that may be relevant to the entity's objectives. The scope of risk assessment is to identify those events that are sufficiently significant to influence managerial decisions. According to INTOSAI GOV 9130, the entity's risk management objective is to enable an entity's management to identify the element of uncertainty regarding the achievement of the objectives set and the associated to risk (to decide on the actions to mitigate or remove it) and to have the opportunity to increase the capacity adding value or, in terms used in the public sector, to provide more efficient, economic and effective services and to consider equity and justice as primary managerial values.

The risk management process involves:

- Risk identification – involves identification of the risks related to the entity's objectives incorporates: identifications of internal and exogenous risk factors, institutional circumstances (risk areas, compartments, organization) and activity relevant perturbation factors (setting responsibility regarding risk management actions).
- Risk assessment – relates to the estimation of risk significance (inherent risk) depending on probability, impact, exposure; assessment of risks determinants categorized as: small, medium, high.
- Assessing the degree of acceptance of risks by management - concerns the evaluation of internal control instruments, estimating the impact that the production of the risks may have on the activity, creating an adequate procedural system, assessing the impact of risks in relation to the achievement of the objectives.
- Establishing actions to be taken. There are four types of risk responses: transfer, tolerance, treatment, termination; The management of the entity will have appropriate controls in place to avoid risks (detection or prevention).

According to the Romanian Court of Accounts reports, depending on the maturity of the understanding of risk management mechanisms, managerial attitude may differ. Thus, the implementation of prudential risk management mechanisms, broadly suppose the acceptance of risks and the undertaking of measures with the sole scope to treat them. On the other hand, accepting risks and managing them in the sense of treating and transferring or tolerating can set the premises for a managerial attitude oriented to pursuing opportunities, either in terms of identifying new opportunities for business development or restructuring the entity. The schematic representation of the relationship between risk management and managerial attitude is shown in Figure no.2.

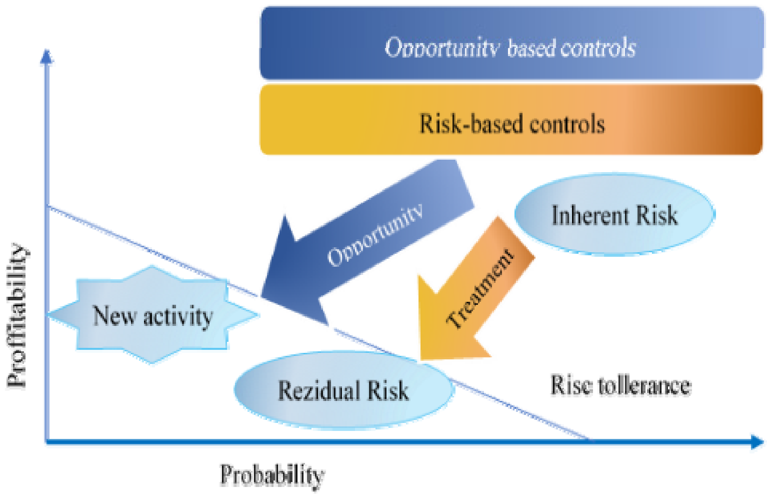


Fig. no. 2 Attitude towards risk. Management risk

Source: Authors' work

Control activities. Control activities include all the policies and procedures established to identify the risks that could impede the entity's objectives.
Control activities can be:

- Preventive: authorization and approval; separation of duties; limiting access to resources and records.
- Tracking: checks; reconciliations; performance analyzes; reporting and reporting of deviations.
- Combined (screening and prevention): revisions; supervising

Management must implement control activities in accordance with applicable regulations and rules. Control activities must be appropriate in the sense that they must be understood quickly and correctly. To be effective, they must be reasonable and integrated into other components of internal control (preventive financial control, financial management control, internal audit). Control activities are supposed to be permanently in line with the plan for the corresponding period.
Information and communication are very important for achieving the internal control objectives of an entity. The quality of information, also known as adequate, timely, accurate and accessible, depends on the ability of the management to make the right decisions. Permanent monitoring of the procedural reporting framework, information flow and access to information sources are required.
Monitoring is done through routine activities, separate evaluations, or a combination of these two methods. Continuous monitoring is specific to current activities. It includes regular approvals and approvals at the level of each component of the internal control system with the scope to prevent unethical behaviors, inefficient and inefficient activities.
The use of *information technology* consists of:

- Organization and functioning of IT structures: it is necessary to establish responsibilities regarding operation, authorization of operations, verification of data, maintenance and security of the informatic system; involves the inventory of risks in the field of IT and the design of efficient strategies for the functioning of the IT structures.
- Implementation of the IT system: monitoring the need of IT resources and the functionality of the IT applications; monitoring the Internet access of IT system users and using external data storage resources; uniform transaction processing, transaction automation, unusual or unauthorized operations monitoring.
- IT system security: monitoring of antivirus systems and defense against cyber- attacks;
- Ensuring that security bailouts are made and data is properly archived.

The risk-cost-value balance
At managerial level, an important challenge for organizations is to find the balance between risk, costs and value. Understanding and ascertaining the conceptual importance of the three pillars of institutional KPI may be equivalent to creating the premises for achieving the entity's objectives while respecting the three fundamental principles of economy, efficiency and effectiveness. Practically, in simple language, the equilibrium relationship allows achievement of significant benefit at a low cost and respectively, an optimized consumption of own resources. One of the most important managerial levers for achieving this balance is the implementation of viable internal control mechanisms.
The challenge is, according to the public sector auditors, to clearly understand the key risks associated with the entity's operations and to implement appropriate cost-effective measures to optimize the achievement of the established objectives.

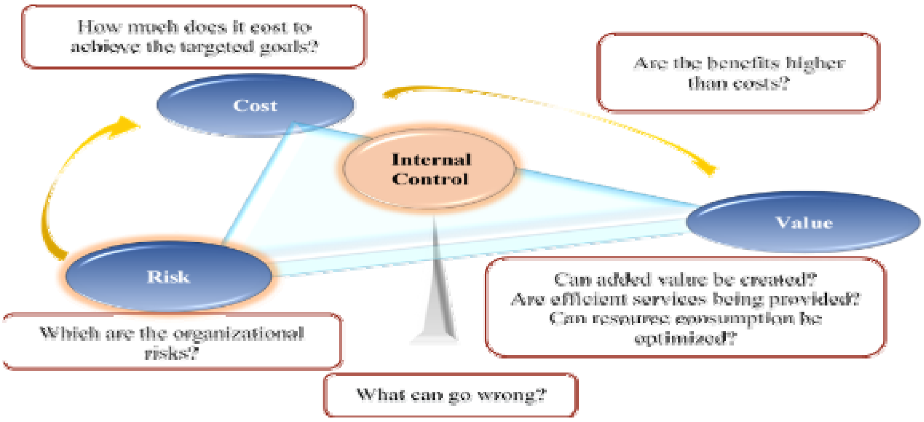


Fig. no. 3 The relationship between internal control and the risk-cost-benefit balance trilogy

Source: Authors'consideration

By summing up the results of both theoretical and empirical analysis, a shortlist of supporting checkpoints can be outlined, with the role of guidance, for balancing the three pillars of effective public governance:

Concerning Risk:

- Do the entity's management understand the risks associated with the activity?
- Are key risks reported to management?
- Does management recognize the correct level of risk?
- Do you analyze, on a regular basis, whether the risks are properly managed?
- Is there a specific risk document (registry)?

Concerning Cost:

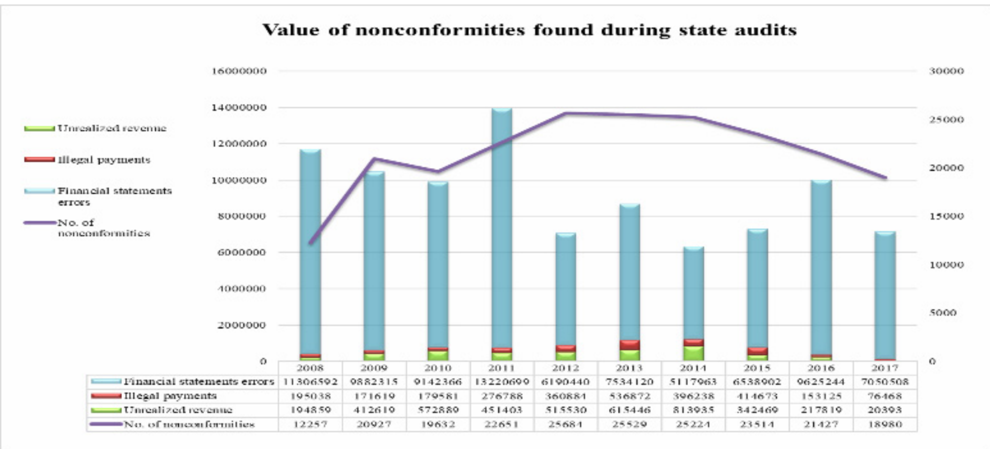
- What is the cost related to the necessary activities to achieve the corporate objectives?
- Are scenarios being designed for costs associated to the operational risks?
- Are there any risks that may double, overlap and which can increase costs?
- Are automatic controls or manual controls being used?
- Is Staff remuneration done at fair costs?
- Is the objectives of the entity achieved through fair costs?
- Is the budget projection correlated with a prior analysis of the operational risks?
- Is the cost dynamics pursued in correspondence with the dynamics of the value?

Concerning Value:

- Are the benefits being higher than costs?
- Do the risks assumed correspond to the established strategic objectives and support a correct cost calculation?
- Can added value be created in risky investments?
- Can efficient services be provided at an optimal operational cost?
- Can resource consumption be optimized?
- Implementation of the risk management process produces improvement solutions?
- Risk management helps to achieve sustained and effective progress or a slowdown in activity?

Our study focuses on identifying an empirical format of references that determine the deficiencies of the balance between the three pillars. In order to achieve this goal, we analyzed the Court of Accounts' reports issued during 2008-2017. The study focuses on the analysis of the quantification of the non-conformities identified by the public auditors at the

level of the verified public entities and on establishing the link between the statistical results and the balance between the three pillars. Thus, the analyzed database comprises of three major categories identified by external public auditors during their missions:
- Income not realized by the audited entities - the category includes those earnings appreciated by the controlling authority not to be realized as a result of deficiencies in the risk management process. Relevant examples are: inappropriate application of legal procedures in the process of revenue collection, non-compliance with accounting regulations regarding income recognition or reporting, deviations regarding the administration and management of public and private patrimony of the state. Our study considered this indicator as a risk reference.
- Illegal payments – our study considers it as having a direct reflection on the entity's costs. Practically, through non-conformities in public procurement procedures, through unlawful payment orders, or through the implementation of defective management decisions, the entity's costs are increased, to the detriment of judicious use of the entity's resources;
- Financial-accounting reporting deviations - referring to the way of complying with the financial reporting or budget execution regulations, the quantification of errors in the implementation of internal financial control or the quality of economic and financial management. It can be said that the results of financial reporting are the expression of the financial position and performance of the enterprise, which makes it possible to associate this referential with the value indicator.
In addition to the non-realized income indicator used as a risk reference, we included in our research the number of cases of non-conformities reported at the level of the public entities during the analyzed period. This reference was associated with the risk indicator and it's evolution was observed in correspondence with the rest of the investigated indicators.
The analyzed statistical data are summarized in Fig. no.4:



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Financial statements errors	11306592	9882315	9142366	13220699	6190440	7534120	5117963	6538902	9625244	7050508
Illegal payments	195038	171619	179581	276788	360884	536872	396238	414673	153125	76468
Unrealized revenue	194859	412619	572880	451403	515530	615446	813935	342469	217819	20393
No. of nonconformities	12257	20927	19632	22651	25684	25529	25224	23514	21427	18980

Fig. no. 4 Value of nonconformities found during state audits
Source: Romanian Court of Accounts, authors' compilation

Thus, from the analysis of the centralized table data it can be noticed that the value of the non-conformities reported at the level of the financial statements has the highest consistence during the analyzed period. Starting from the premise that financial reporting, as a representation of the financial position and performance of an entity, represents the value expression of the achievement of projected objectives, we consider that the risk-cost-value balance trilogy tends to descend to an unfavorable value direction at any increasing oscillation of risk or cost. From the point of view of the number of reported nonconformities, the graphical analysis does not show that there is a predictable and correlated trend between the risk of increasing the number of nonconformities signaled and their value expression.

Conclusions

By applying internal control rules and procedures at all hierarchical and functional levels, the entity aims to achieve the proposed objectives. The public managers must ensure the development, approval, implementation and improvement of organizational structures, methodological regulations, procedures and evaluation criteria to meet general and specific internal / managerial control requirements. Requirements of a viable internal control system are: adaptability - to size, complexity and environment of the entity; universality - target all levels of leadership and all activities / operations; uniformity - be built with the same "instrument" in all public entities; adequacy - provide reasonable assurance that the entity's objectives will be attained; economy - the costs of implementing the internal control system are inferior to the benefits resulting from it; compliance - be governed by the minimum management rules contained in internal managerial control standards.

Limitations of internal control. Internal control can only provide reasonable assurance that the entity's objectives are met. The probability of their realization is affected by the inherent limits of internal control, for example by internal and external factors that cannot always be taken into account from the date of implementation of the inward control system. The costs of implementing internal control must not exceed the expected benefits. The human factor fulfills a decisive role in any internal control system. Inattention, inappropriate professional training, indifference, abuse can lead to the inefficiency of internal control. Formalizing the implementation of the internal control system may lead to its inefficiency or financial loss.

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