

# Evaluation of internal controls in the public sector: the case of the General Comptroller's Office of the State of Pernambuco



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## ABSTRACT

The supposition that weaknesses in internal control systems have facilitated emblematic cases of fraud and corruption around the world, especially in the Brazilian public sector, has raised questions about the functioning of these systems, and the evaluation of internal controls is an important item on this discussion. The ability of this evaluative procedure to identify weaknesses, vulnerabilities and the level of effectiveness of the internal control system, as well as to facilitate its improvement, in support of the organization's objectives and the legitimacy of public management in society, may deviate according to the configuration assumed by the evaluators. In order to investigate the procedure for the evaluation of internal controls in the public sector, this research was instrumented by a case study within the scope of the General Comptroller's Office of the State of Pernambuco (SCGE). The results demonstrated that the evaluation of internal controls is related not only to the procedural apparatus, but also to the cognitive aspect that involves the process, since everyone needs to understand the meaning of the evaluation and its repercussions at all stages so that the desired ends can be achieved.

**Keywords:** evaluation; internal control; public sector.



## 1. INTRODUCTION

The supposition that weaknesses in internal control systems have facilitated the emergence of emblematic cases of fraud and corruption around the world, both in private sector organizations and in the public sector, especially in the Brazilian public sector, raises questions about the functioning of these systems, and how those systems are evaluated.

These same observations led to the search of corporate governance systems for the improvement of their control mechanisms. In this context, conceptual and methodological models have enriched literature and practice regarding control in organizations, and some of these models have become references, such as the Committee of Sponsoring Organizations of the Treadway Commission (COSO – 1992) and the International Organization of Supreme Audit Institutions (Intosai – 2004), which provide the basis for an internal control system to be evaluated within the public sector.

An important item for this discussion is based on the configuration of the procedure for the evaluation of internal controls, since this procedure can identify weaknesses, vulnerabilities and the level of effectiveness of the internal control system and favor the improvement thereof to further the organization's goals and the legitimacy of public administration vis à vis society.

From the perception of those who evaluate the system of internal controls, the form of configuration of this procedure may unveil challenges, limitations, facili-

tations or even potentials due to the combination of aspects that are characteristic thereof, such as the purpose of the evaluation; the sequential ordering of phases; the choice of the techniques used and the definition of the scope and dimensions of the evaluated subject. However, studies on systematically articulated initiatives of this evaluative procedure within public management that explore this perception, are very rare, if not unknown.

Thus, an inquiry that arises amid the current day-to-day observation regarding Brazilian public management, which this research proposes to investigate, is expressed by the following problem question: *how is the procedure for evaluating internal controls in the public sector configured from the perception of evaluation agents?*

To answer this question, the objective of the research was to investigate the internal controls procedure in the public sector. The object of the study was the practice developed at the Comptroller General's Office of the State of Pernambuco (SCGE/PE), which is the body responsible for coordinating the internal control system of the Executive Branch of the state of Pernambuco. Thus, the result should contribute to the literature in the area by articulating other works related to control issues in organizations to integrate them into the context of the evaluation of internal controls in the public sector.

Therefore, the study is vested with importance because of its scientific novelty and the relevance the bodies responsible for coordination of internal control systems have in connection with the social reach of their actions within society.

This article introduces the reader to internal control in organizations to the evaluation of internal controls and relevant aspects of their configuration. Next, the methodological procedures used in the research are presented followed by the discussion on the outcome and some final considerations.

## 2. CONTROL IN ORGANIZATIONS: FROM LITERATURE TO PRACTICE IN BRAZILIAN PUBLIC ORGANIZATIONS

A major challenge in the integration of structures and paradigms regarding control in organizations results from the fact that the literature has largely, developed in different branches of knowledge independently. Whether identical or very similar, concepts are referred to in different technical terms. In addition to the communication difficulties caused by using different terms, researchers working with a paradigm tend not to mention works from other areas of knowledge, which makes it even more difficult to have progress in the convergence of literature on control in organizations (MERCHANT; VAN DER STEDE, ZHENG, 2003).

Today, the literature on organizational control is rich and varied, made up of various structures and paradigms that, even if developed largely independently, are useful in establishing a general notion of the organization of their field of study. The different approaches suggest different levels of control en-

forcement, both for relations with the external environment and for the internal environment of the organizations.

A more practice-based focus is given by the literature on internal control. Internal control is a term that auditors have long applied to sets of controls that are designed to prevent or detect errors and irregularities, especially while recording transactions that could lead to financial statements with material misstatements. Over time, auditors' internal control conceptions have expanded to include other areas of management control and corporate governance (MERCHANT and OTLEY, 2006).

In 1992, perceiving that the term "internal control" had a different meaning for different people, among accountants, lawyers and administrators, for example, COSO presented a conceptual model of internal control system that was widely accepted worldwide and has become a true paradigm of control, *Internal control – integrated framework* (1992), duly updated in 2013. This conception brought a comprehensive definition of internal control, seeking to meet the needs of various parties related to the subject (COSO, 2013, p. 6):

It is a process conducted by the top management, managers and other professionals of the organization, to provide reasonable assurance regarding the objectives related to the effectiveness





of operations; reliability of information; and compliance with the law and regulations.

It is a definition formulated under the urge of a predictive ethical and instrumental behavioral philosophy that establishes the control environment as the basis for the other components of the internal control system, and the risk assessment as an essential mechanism facing continuous changes brought about by changes in the industry, economy, regulatory and operating conditions (DANTAS et al., 2010; RATCLIFFE; LANDES, 2009).

In the context of public sector organizations, Intosai has also become a conceptual and methodological reference on internal control, incorporating the COSO model in its guidelines for internal control standards of the public sector (INTOSAI, 2004).

Conceptually, the literature on internal control has developed rapidly since the 1990s, with the contributions of COSO (1992) and Intosai (2004) influencing the practical application of relevant concepts in public organizations around the world (ABDOLMOHAMMADI; BURNABY; Hass, 2006). However, apparently the reflexes of this development are not yet visible to society when shifting the spotlight of this discussion to the internal control system practices in the Brazilian public sector.

Notwithstanding the conceptual development of internal control, in the practical context of Brazilian public organizations, the operation of the internal control system shows signs of weakness. Cases of public resource malfeasance reported by the media are recurring, corroborating the observations by Ribeiro Filho and (2008), and the statement that “without internal control, or with a poor internal control, an entity is prone to the misleading and misuse of resources, to fraudulent management” (ibid., p.50).

In order to monitor properly the enhancement and strengthening of the internal control system, an important item in this discussion is the evaluation of internal controls. In addition, how this procedure is configured by the evaluators, since this configuration can influence their judgments (ASHTON, 1974; EMBY; FINLEY, 1997), being, therefore, an essential item for the study of internal control in organizations.

### 3. EVALUATION OF INTERNAL CONTROLS

An essential aspect for the effectiveness of a system of internal controls is its monitoring, which is



one of the fundamental components pointed out in the COSO (1992) conceptual model for their operation, since it allows a timely verification of the correct application of all the components of the internal control system according to the objectives to be achieved by the organization.

This monitoring, in part, is fundamentally subsidized by the process of evaluating internal controls, which assesses whether the system being applied in practice is in accordance with the institutional objectives, i.e., if it is fulfilling the purposes for which they are considered adequately and sufficiently (CASTRO, 2010).

According to Pickett (2003), the evaluation should be applied based on the controls needed to ensure that the organizational objectives are achieved with no major loss or inefficiency, providing reasonable assurance for decisions about the course of action to be taken by the organization.

This makes the evaluation of internal controls take on a significant level of relevance in this area, drawing the interest of researchers on several aspects with which this evaluation process is involved. Thus, some aspects that characterize such an important organizational process and that can be found in pertinent literature recurrently are presented in sequence:

These different characteristic aspects of the process of evaluating internal controls reveal the possibility of diversity between configurations by their

combinations. Thus, in view of this diversity, the ability to identify weaknesses, vulnerabilities and the level of effectiveness of the internal control system, as well as to improve the organization’s objectives and the legitimacy of public management in society can vary according to with the characterizing aspects assumed by the evaluators (ASHTON, 1974; EMBY; FINLEY, 1997).

From the perception of those who evaluate the system of internal controls, the way in which this procedure is set up can reveal challenges, limitations, possibilities or even potentialities due to the combination of aspects that are characteristic of it. Thus, understanding this perception in public management can be a means to explain the effectiveness potential of internal control systems in Brazilian public sector organizations.

#### 4. METHODOLOGICAL PROCEDURES

The presupposition of this quantitative research is that individuals socially construct meaning in interaction with their world. Its exploratory purpose provides greater familiarity with the phenomenon investigated, with a view to making it more explicit, enabling the improvement of ideas and the discovery of intuitions. In it, case study, which is the methodological procedure adopted, is an appropriate instrument to make the viable the exploratory purpose of the research (GERRING, 2006; GIL, 2002; HANCOCK, ALGOZZINE, 2006; MERRIAN, 2002; YIN, 2015).

Thus, as a criterion to select the case to be studied, in addition to the convenience of geographic lo-

**Table 1:**

Categories of characteristics in the evaluation process of internal controls

Feature Categories	Feature properties
Purpose of the evaluation of internal controls	Discussions on the evaluation of internal controls can be distinguished in two approaches to the purpose of the evaluation, (1) from an external agent evaluation perspective traditionally discussed as part of an independent audit process, to support the determination and planning the nature, timing, and extent of substantive audit procedures to be applied; and (2) from the perspective of internal agents, focused on the development, implementation and improvement of systems of managerial controls (BIERSTAKER; THIBODEAU, 2006; DEUMES; KNECHEL, 2008; PICKETT, 2003; RATCLIFFE; LANDES, 2009; WINOGRAD, GERSON; BERLIN, 2000).
Phases of the internal control evaluation process	The configuration of the stages and phases of an evaluation process is not something uniform or rigid, on the contrary, it can reflect the diversity and even individualities among evaluators (Almeida, 1996; ). However, Pereira (2001) observes the existence of elements intrinsic to this process, which are configured in a standard of comparison (ideal or desired situation) based on the identification of the objective and object of the evaluation; in defining the criteria for judgment; and value judgment, because of the evaluation process.
Techniques for evaluating internal controls	The effectiveness of an audit based on the control evaluation can be compromised, since the choice of documentation formats leads to different audit conclusions (BORITZ, 1985; ASHTON, 1974). Four formats are most commonly used by auditors to document their understanding of an entity’s internal control system, such as: the questionnaire and the narrative; most frequently used, and flowcharts and matrices, which are used less frequently (BIERSTAKER; BEDARD; BIGGS, 1999).
Quantitative and qualitative dimensions assessed in internal controls	The meaning attributed to the term “evaluation” in a broad sense conveys the quantitative and qualitative dimensions of its object. The qualitative meaning of evaluation expresses the idea of judgment, the formation of judgment or attribution of concept to certain attributes of internal control. “Measure” expresses the quantitative meaning of the term “evaluation”: it refers to the quantification of internal control, with the purpose of expressing them in quantity parameters (BIERSTAKER; THIBODEAU, 2006; COSO, 1992; FERREIRA; OTLEY, 2009; GAUTHIER, 2006; PEREIRA, 2001; PICKETT, 2003; RATCLIFFE; LANDES, 2009).
Extent of the internal control system evaluated	According to the organizational amplitude taken as the object of the evaluation, the generalization about the interpretations reached as a result may reflect or not the characteristics of the organizational control as a whole. However, even with a narrower range (over specific subsystems or controls), their results can positively influence the configuration of the other components of the organization’s control structure. Thus, the interests of the evaluation should also consider its reflexes, which makes the definition of the breadth of the evaluation of internal controls a relevant aspect in its configuration (ASHTON, 1974; BORITZ, 1985; BIERSTAKER; THIBODEAU, 2006; COSO, 1992, 2013; DEUMES, KNECHEL, 2008; EISENBERG, 1997; FERREIRA; OTLEY, 2009; GAUTHIER, 2006; PICKETT, 2003; RATCLIFFE, LANDES, 2009).

Source: Prepared by the authors.



cation to develop the research, based on access, time, available resources and availability of the participants, we observed its context as a procedure for the evaluation of controls carried out within the scope of public administration, periodically and regularly.

The evaluation procedure carried out in the Government of the State of Pernambuco, more specifically, in the SCGE/PE, was the case selected for the study because it fit the pre-established criteria.

After defining the case, to obtain convergent lines of investigation, multiple sources were used to collect the research data. Thus, data were collected through the triangulation of focus group techniques, document analysis and direct observation, when using references such as Dawson (2002); Patton (2002) and Gibbs (2009), not only for collection, but also for data analysis, which began concurrently.

The focus group technique was applied with the participation of nine public employees of SCGE/PE, from the various levels of their organizational structure (strategic, managerial and operational), which deal, among other duties, with the process of evaluation of internal controls. The document analysis technique was applied in 18 documents made available by SCGE/PE, between reports and opinions, which included as essential content the evaluation of internal controls. Regarding the technique of direct observation, the authors monitored an inspection for internal control evaluation (control of the filing of rendering of

accounts cases) performed by SCGE/PE employees in a government secretariat.

Thus, for the analysis initiated during the collection phase, the data were organized by concept-based coding.

Coding is the way in which the data being analyzed are defined. It involves the identification and registration of one or more text passages or other data items as parts of the general table which, in some sense, exemplify the same theoretical and descriptive idea. The categories or concepts that the codes represent may be based on research literature, previous studies, topics in the interview script, perceptions about what is happening and so on (GIBBS, 2009).

As a conceptual source to define the categories of codes, to organize and analyze the data collected, we considered the characterization aspects of the process of evaluation of internal controls expressed in Table 1 of this article, which are: (1) purpose of the evaluation of internal controls; (2) phases of the evaluation process of internal controls; (3) techniques for evaluating internal controls; (4) quantitative and qualitative dimensions assessed in internal controls; and (5) the assessed range of the internal control system.

## 5. DISCUSSION ON THE OUTCOME

The evaluation of internal controls carried out by SCGE/PE, is a recent organizational process, started in

the middle of 2013, under a continuous methodological development and restricted to a thematic operational unit, the Rendering of Accounts Auditing Unit. This process is applied in a systematic way within the organs of the direct administration of the Government of Pernambuco and is guided by an annual plan of activities.

Under the established categories, after the organization and analysis of the data collected, results were obtained that allowed the characterization of this internal control evaluation procedure within the SCGE/PE, and these results are presented and discussed in the following topics.

### 5.1 STRENGTHENING THE INTERNAL CONTROL SYSTEM AS THE FOCUS OF THE EVALUATION

Under the analysis related to the purpose of evaluations of internal controls, it was generally verified that all organizational levels (strategic, managerial and operational) involved in the evaluation of internal controls perceived that this evaluation process in the institutional scope is relevant to strengthen the system of internal controls in the scope of state public administration.

The evaluative purpose emerging in its documented reports, of identifying and reporting improvements on the evaluated controls, is in line with the theoretical perception of a prospective focus, aimed at offering reasonable assurance as for the fulfillment of the organizational objectives, in a preventive action that aims at strengthening internal control systems.

However, the practical perception of the difference in purposes by which internal controls are evaluated (external agent – planning or internal agent – system effectiveness) is not very clear for those involved in the execution of the evaluation process.

In fact, the research data show a variation in the perception of those involved at a strategic, managerial and operational level regarding the conceptual approach that the evaluation of internal controls is shaped by the improvement of governance through the efficiency, effectiveness and effectiveness of the control system interns. This is only clearly recognized at the strategic level.

Those who participate in the operational scope understand the evaluation of internal controls as a procedure, but not in a holistic sense of the evaluation activity and its repercussions inside and outside the institution.

On the other hand, all levels recognize that the attitude of the parties responsible for the operation of the internal control system evaluated is collaborative and receptive to the idea of improving internal controls as a whole. That when they understand that SCGE/PE's performance is focused on improving management and not punishing, they become receptive to the activity.

### 5.2 CHALLENGES AND LIMITATIONS IN THE EVALUATION OF INTERNAL CONTROL DIMENSIONS







With respect to the dimensions that involve internal control, the reports and opinions arising from the SCGE/PE internal control evaluation activities clearly express these dimensions, but process participants at all levels (strategic, managerial and operational – execution), they find it difficult to perceive in practice the qualitative and quantitative dimensions, especially in the area of measurement (sufficiency) of internal controls.

The qualitative dimension of the internal controls is evaluated according to the comparative standards made up of elements of the structural composition of the internal control system (control environment, risk assessment, control activity, information and communication, and monitoring), showing a harmonic idealization with the conceptual model conceived by COSO (1992). The application of the evaluation criterion determines, in turn, the adequacy or inadequacy of the controls practiced within the scope of the evaluated organs.

In the evaluation of the quantitative dimension, the range of the control applied over the range of the controlled object is observed. The application of the evaluation criterion thus determines whether the amount of control applied is “sufficient” or “insufficient” in relation to what is being controlled.

This quantitative evaluation, however, is limited with respect to the excesses of internal controls, that is, the excess is not evaluated, since, besides being sufficient, a certain applied control can be excessive;

which is also as bad as its inadequacy, as highlighted by Pickett (2003).

It is worth mentioning that SCGE/PE employees were asked about the terms used in the literature on internal control, if they were easy to understand. It study noticed that, to some extent, all had difficulties in understanding these terms.

This fact may compromise the results of the evaluation of internal controls, as well as the view of those assessed regarding the relevance of the activity. Lack of understanding of the terms makes the recommendations in the technical parts produced in the process innocuous, as they have no meaning to the evaluated party.

### 5.3 DIVERSITY OF COMPREHENSION IN THE ORGANIZATIONAL LOGIC OF INTERNAL CONTROL EVALUATION

Based on the analysis performed, we observed an evaluation process composed of logically ordered and time sequenced phases.

In an initial phase, the idealization of the comparative parameters is contemplated, which will be confronted with the controls practiced; and the identification of the evaluation criteria, which will inform the judgment on the controls that are in practice.

A second phase characterizes the actual evaluation, fieldwork, when the controls practiced are





compared to the ideal standards, and, subsequently, the judgment is based on the previously defined evaluative criteria.

In some cases, a transaction testing application phase is also observed, as a confirmation of the results obtained in the evaluation, through the analysis of the effectiveness of the application of the controls practiced.

Finally, as the last phase of this process, recommendations are presented for improvements in internal control systems.

Although the constitution of the evaluation process corresponds with the theoretical meanings, this more detailed perception about the constitution of each phase is not understood uniformly among those involved, and still needs a more in-depth reflection as a way of strengthening the practical domain of this process and for the methodological development of the practice itself.

#### 5.4 THE POTENTIALITIES OF THE TECHNIQUES USED TO EVALUATE INTERNAL CONTROLS

Likewise, the research revealed interesting positions regarding the documentation techniques used in the evaluation of internal controls within SCGE/PE. The techniques are used to support the internal control evaluation process, which may influence the judgment and the results achieved. Thus, those involved in the evaluation process understand that the use of the techniques is important because they reduce the subjectivity factor in the evaluation results.

The questionnaire is adopted as a technique for documenting the internal controls practiced in the evaluated organizations, in the evaluations of internal controls performed by SCGE/PE. It is emphasized that this technique was pointed out as the most comprehensible for those audited in the opinion of the participants of the research. The questionnaires are formulated based on the idealization of the comparative parameters and are answered based on data collected through triangulation of sources that provide them with information support, namely: (1) interviews with those responsible for the control; (2) documents proving the existence and functioning of the control; and (3) direct observation of the operation of the control.

The standardization of the questionnaire in this evaluative model was pointed out as a management need based on the attribute of comparability between evaluations. However, achieving a more in-depth concept of this attribute is still a challenge for the practical enjoyment of its benefits. The perception of the concept of comparability among those involved does not reveal what can be explored about it in all its perspectives, in convergence with Pickett's (2003) notes, as well as in an individual evolutionary perspective, in which one can evaluate the evolution of the control system of a specific organ, for example, in different evaluations carried out over time; and also in a peer-to-peer perspective, in which one can assess the level at which control systems are established concomitantly in several evaluated organs; and also as a means of verifying qualitative aspects

of the execution of internal control evaluations; among other potentialities.

In addition, in the SCGE/PE assessments, one notes the use of norm compliance and transaction tests at different times. The first compliance test is used as part of the qualitative evaluation of internal control, which verifies not only if the norms are being fulfilled, but also the very existence of norms, in comparison with an ideal standard of the evaluated control.

This way of evaluating highlights the control environment, highlighted by COSO (2013) as the control consciousness in the organization, a fundamental basis for the system of internal controls. The rules governing the operation of controls are of fundamental importance to this component.

The test of transactions, in turn, is placed as a confirmatory phase of the evaluation process practiced by SCGE/PE, in which the effectiveness of the internal controls applied in a certain period is verified, by observing the recurrence of failures in the transactions (operations) within that period. The results of this test have a significant informative potential for the management of the control, which verifies the behavior and performance of the internal control evaluated.

Pickett (2003) addresses this perspective, which highlights the potential of strategic tests performed on internal controls, supporting the conceptual appropriateness of the use of these tests in the internal control evaluation process modeled by SCGE/PE.

### 5.5 THE RESTRICTION OF RANGE AS A FACILITATOR OF METHODOLOGICAL DEVELOPMENT

The organizational scope of the internal control evaluation process performed by SCGE/PE is characterized by subsystem level performance and specific internal controls, in the light of the technical parts analyzed and the collection of information from those involved in the process.

The SCGE/PE internal control evaluation model presents a thematic limitation, that is, it is applied only to controls related to the accountability process of the application of public resources. This limitation was pointed out by those involved as a deliberate choice, to allow a more specific follow-up on the evolutionary process of the practice.

Within this theme, it is possible to verify the application of the evaluation process at different levels of the system of internal organizational controls; At the same time, more complex evaluations are carried out



on subsystems related to different types of public expenditure processing (normal application regime, down payment arrangements, etc.), but simpler evaluations are performed only with specific internal controls of these subsystems.

Even though evaluations are performed in a partial extent of the internal control system, those involved in the evaluation process affirm that the results are positively impacted by the entire organizational structure to which the evaluated controls belong, fomenting and strengthening the control consciousness in the organization.

## 6. FINAL CONSIDERATIONS

In general, the results indicate that the evaluation of internal controls within the SCGE/PE has been worked at institutional level with the necessary relevance in the organization to achieve the intended goals throughout the state.

As a recent practice within SCGE/PE, we noted that it is still at an early stage of the process of institutionalization, with obvious characteristics of the habitualization of activities carried out jointly by different individuals, who need to negotiate rules and procedures flexibly and reflexively. Categories and classifications generate interpretive schemes – drawn from the construction of meaning among the members of the organization that relate to the procedure of evaluation of internal controls.

When specific schemes become routine, through application and repeated use, they develop a habitual

character, taken for granted. Since joint activities are habitualized and reciprocally interpreted, patterns are both strengthened and deepened as they are transmitted to others, especially to newcomers. When these schemes are perceived as goals, they become externalized facts, and their contingent origins are obscured, promoting sedimentation, which occurs when institutionalization survives for several generations in the organization, that is, it becomes part of the organization's history (POWELL; BROMLEY, 2013; TOLBERT; ZUCKER, 1999).

The methodology used by SCGE/PE to evaluate internal controls is supported by sophisticated concepts defined by the pertinent literature that supported the categorization of the data of this research. However, the need for the development of individual competences, which brings together knowledge, skills and attitudes (DURAND, 2000), is perceptibly related to those involved in this evaluation process, but naturally justified by the initial phases of the institutionalization process of this initiative. These skills are developed in the practical context, through the experiences of the employees with the evaluation process, requiring a prolonged time to reach a more significant level of maturity, as can be seen from Fleury and Fleury's (2004) notes.

It should be emphasized that this research demonstrates that the evaluation of internal controls is related not only to the procedural apparatus, but also to the cognitive aspect involved in the process, since everyone needs to understand the meaning of the evaluation and its repercussions at all stages so that the desired goals are achieved.

A discussion of results raises, under investigative skepticism, the possibility of generalization of the findings regarding the level of institutionalization of the evaluation practice of internal controls in the organizations of the Brazilian public sector. In view of the limitation of the qualitative methodological procedures, the purpose of this research requires the accomplishment of complementary researches. This reveals the contributory potential of the present work, articulating several researches of the study of organizations, under the theme of internal control, aiming at integrating them into the Brazilian public administration context and launching a scientific basis as a perspective for new research.

As an additional contribution, we point out that new research can also be carried out from the perspective of those evaluated in relation to the process of evaluation of internal controls in the public sector, since they are the ones who implement and undergo the evaluations of the control bodies.

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