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## ***Functions of municipal comptroller offices: a study among city halls from Pernambuco State***

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**Abstract:** *The research aimed to investigate the functions performed by the comptroller offices in Pernambuco's municipalities. Additionally, it investigated the existence of a relationship between these functions and some characteristics of the municipalities, such as current revenue, population size, area of the territorial unit and HDI. The methodology was configured as exploratory and descriptive. Regarding its techniques, direct documentation (extensive direct observation with the application of a questionnaire) and indirect documentation (bibliographic and documentary research) were used. As a result, it was observed that 79.07% of the municipalities stated that they perform the accounting function, 81.40% for the managerial function, 46.51% for the tax function, 32.56% for the protection and control of assets function, 100% the internal control function and 81.40% the risk control function. In addition, the study found that only 23.26% of them perform all functions of comptrollership, and that there are no statistically significant differences between the variables current revenue, population size, area of the territorial unit and HDI of the municipality in relation to whether control functions are exerted. The study also failed to verify any statistically significant association with respect to the mesoregion in which the research respondent municipalities are inserted and to the amounts of comptrollership functions exerted. And, although municipalities with up to two control functions, in relation to the number of functions, presented lower averages of current income, population size, area of territorial unit and HDI, these were not statistically significant.*

**Keywords:** Controllership. Municipal Comptroller Office. Functions of the Comptroller Office.

**JEL:** R1, R5, K23.

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## Introduction

Comptroller offices assist public managers by providing information on the efficiency of public administration, becoming an essential element in managing the quality of expenditure, extrapolating its notably formal and bureaucratic aspects.

The activities carried out by comptroller offices should reflect the various functions that contemplate management control, including the internal control of public entities. Chaves (2011) emphasizes that it is common to use the terms "internal audit", "internal control" and "comptroller office" as synonyms, however in the public sector internal audit is called internal control and external audit is called external control; the denomination of comptrollership has recently emerged as a reference to the internal control of public expenditures.

In light of corruption scandals involving the management of public resources in Brazil over the years, it is observed that the embezzlement of this treasury has compromised both confidence and credibility of the population towards Brazilian public institutions, which have been increasingly questioned by society.

One way to try to curb public agents' corruption has been through the demand by society for transparency in the acts of managers and strengthening the control of public resources (Machado & Tonin, 2015).

Control is one of the essential components of the administration, being of extreme relevance to itself and its stakeholders. For Meirelles (2007), control in the public administration is the faculty of orientation and correction that a Power, organ or authority exert on the conduct. Any organization results in control. This process contributes to minimize inappropriate behaviors, requiring a degree of compliance as well as the interaction of various activities (Tannenbaum, 1975).

For Soares (2012), the implementation and maintenance of an Internal Control System can not only enable the monitoring of the budget, financial, accounting, equity and operational activities, as well as providing support and guidance regarding the legality, morality and efficiency of public activity, so as to ensure that the interests of the community are being met.

In this sense, several authors have been demonstrating in their work the importance of comptrollership implementation in the public sector. However, specifically regarding the Municipal Comptroller Office, it was verified that there are few published works in this area, where some authors address the importance of its implementation, such as Peixe (1996), Almeida, Taffarel and Gerigk (2003), Cruz, Spinelli, Silva and Carvalho (2014), Gomes, Peter, Machado and Oliveira (2013) and Silva, Carneiro and Ramos (2015).

It is noteworthy that although the Federal Constitution requires the performance of an internal control unit, it occurs that in municipalities even after almost three decades of promulgation of the Constitution this legal requirement is still being implemented. Cruz et al. (2014) emphasizes that not many municipalities created internal control systems. In addition, not many Brazilian municipalities have developed internal control units capable of acting more

incisively in the fulfilment of their functions, in their most comprehensive form. There is a mismatch with the process in the federal government, characterized by the strengthening of the Comptroller-General Office (CGU), currently the Federal Ministry of Transparency and Comptroller-General Office, and its consolidation in the prevention and struggle against corruption.

For Araújo (2015), examining the controls implemented in municipalities means not only ensuring that corrective actions are in place within their internal control systems, but also actions that prevent the occurrence of fraud or irregularities that influence performance and results of the activities.

Therefore, control bodies must carry out activities that contemplate the whole object of control in public management, including formal and managerial aspects. In this sense, the activities carried out by comptroller offices should reflect the various functions that contemplate management control, including the internal control of the public entities.

In this context, the objective of this study is to investigate the comptrollership functions exercised by the municipalities' comptroller offices in Pernambuco. Additionally, it also seeks to observe the existence of a relationship between these functions and some characteristics of the municipalities.

## **1. Literature Review**

### **1.1 Controllership and its functions**

Regarding the concept of Controllership, there is no consensus in the literature among authors, corroborating that there are still many doubts about the topic on the screen. Thus, the different approaches found will be presented according to three perspectives identified: area of knowledge, procedural aspects and organizational unit.

As a branch of knowledge, some definitions of Controllership have been verified in the literature. In this perspective, Tung (1980) emphasizes that controllership is a science responsible for investigating the objectives and achievements of the entity from the economic point of view. The author adds that controllership contemplates the entity's planning, analysis and control, not limited to the study of accounting facts.

The second perspective verified in the literature brings Controllership as procedural aspects. This way, Fiske (1940) states that controllership is an informative function that accumulates, analyzes and informs the administration, investor-owners and other essential shareholders, financial and statistical data.

The third perspective refers to the organizational aspects, that is, how controllership is formally structured within organizations. Crozatti (2003, p.17) describes that the controlling unit is responsible for the synergy among areas, optimization of economic results, management of the administration information systems, provision of quantitative assessments and the elaboration of strategic planning.

In Borinelli's view (2006), although in practice typical controllership activities exist in a company, independently of a formal sector named "controller's office"; there must be, in the formal system of organizations, an organizational unit that performs the Controllership activities of corporate or divisional character, which need to be developed in a macro way, and that consolidate the activities carried out in a decentralized manner.

It is observed in the literature an absence of uniformity regarding the activities to be exercised by controllers in the organizations. In this context, defining the functions of controllership becomes quite complex (Oliveira, Perez Jr & Silva, 2002; Siqueira & Soltelinho, 2001; Suzart, Marcelino & Rocha, 2011), which is influenced by the structure and managerial model adopted by each organization.

In this way, different opinions verified in the literature regarding the functions that Controllership shall have will be presented as follows.

Johnson (1971) defines the role of controllership from the structuring of five key areas that focus on organizational outcomes, namely: accounting system and the organization of accounting; providing regular reports to managers; break-even analysis; long-term planning; and monitoring of results with research and development.

For Kanitz (1976), the functions of controllership encompass information, motivation, coordination, evaluation, planning and follow-up. As for the public area, Thompson, Fred and Jones (1986) complement that they ought to contemplate support in the preparation, formulation and publication of budgets.

In another perspective, Willson, Roehl-Anderson and Bragg (1995) present functions that can be considered typical of controllership, for example:

- planning function: it is related to the development of an integrated operational plan, in the short and long term, in line with the institution's goals and objectives;
- control function: it consists of elaborating standards, destined to evaluate the organizational performance and to compare the results obtained;
- informative function: refers to the activities of preparing, analyzing and interpreting reports that contain important data to the decision-making process;
- accounting function: includes the activities performed by financial, tax and cost accounting, aiming, particularly, to provide essential information to the decision-making process.

Almeida, Parisi and Pereira (1999) teach that the functions exercised by controllership should aim at the organization's management, so they should contemplate the highlights below:

- To subsidize the management process, which refers to the support and structuring of its phases, through the use of an information system to aid decision making;

- Support the performance evaluation, which includes elaborating the performance analysis on areas, managers and on the entity itself;
- Support the results assessment, which is related to analysis and evaluation of the institution's results in all dimensions, collaborating on the development of standards;
- Managing information systems, which consists of elaborating decision models and information models to management support;
- Meet the market agents, which refers to the activities performed to meet external demands of the organization.

According to Cavalcanti (2001), controllership helps managers to plan and control the activities of the organization through four main functions:

- Planning – managing the process of identifying what is to be done, what is the deadline for execution and how it should be done. This process is dynamic, since it seeks to highlight the resources available and necessary for the company to face competition;
- Organization – seeks to identify qualified professionals, technology and facilities so that the controllership can fulfill its role effectively;
- Direction – to ensure the synergy between human, financial, material and technological resources, aiming at fulfilling the mission and future vision of the company;
- Evaluation – to develop a system for measuring objectives and goals established by the company with the purpose of interpreting the results, in order to define trends and interrelations among the variables that affect, in a positive and / or negative way, its business.

Oliveira et al. (2002) also point out several functions, of which the most important for authors are: to organize and report relevant information and data, to maintain permanent monitoring of controls and to exert force or influence capable of interfering on decisions.

However, Borinelli (2006), by proposing the ECBC, followed an understanding along the same lines as Willson, Roehl-Anderson and Bragg (1995) and brought the following functions as typical of controllership:

- accounting function: corresponds to the management of activities developed by financial accounting;
- managerial-strategic function: it is related to the activities that aim to support decision-making and achievement of the organizational objectives;
- cost function: it is related to the activities developed by cost accounting;
- fiscal function: corresponds to the management of activities developed by tax accounting;
- asset protection and control function: includes the activities to safeguard the assets of the organization;
- internal control function: it is related to the development, implementation and monitoring of the internal control system;

- risk control function: it is linked to the activities of risk management with demonstration of their effects;
- information management function: these activities involve the creation and modeling of accounting, financial, economic, patrimonial and management information systems.

Although the literature does not distinguish the controllership activities that should be exercised by private and public spheres, it was observed that regarding the Municipal Comptroller Offices there is a study of Almeida, Taffarel and Gerigk (2003) where they affirm that among the several functions carried out, it is important:

- implement a new system of internal control to the departments and municipal funds secretariats, through an information system;
- help define goals for the Municipal Administration;
- monitor the implementation of the targets, demanding the expected results and correcting any distortions that may occur;
- provide the Mayor, Secretaries and the Managers of the Indirect Administration with timely and contextualized information;
- controlling revenues and expenses by studying their trends;
- study the modifications in the relevant Legislation;
- control the budgetary and financial execution of both direct and indirect administrations;
- propose alternatives and solutions for problems detected;
- filter data, preparing useful, clear and objective information;
- to control, based on the data of the Accounting Department, the percentages and indices imposed by the current Legislation;
- take part in the discussion and preparation of the Multi-Year Plan (PPA), the Budget Guidelines Law (LDO) and the Annual Budget Law (LOA); and
- make information available to the Municipal Legislative and to the population.

It is observed once again that there is no consensus in the literature when addressing the functions of the Controllershship. But, it is verified that exercising the informational support to assist public managers in the execution of their activities is a central axis.

For purposes of this study, the functions attributed to the Comptroller Offices, verified in the research by Suzart et al. (2011): accounting, managerial-strategic, tax, asset protection and control, internal control and risk control

It is observed that the authors listed six functions that were identified in the execution of the activities of some state and federal comptroller offices. These functions encompass several activities necessary for the control bodies to protect the public patrimony and to assist in their accountability.

## 1.2 Municipal Comptroller Offices

Municipalities in general, when performing their routines to carry out their functions, execute, in some way, internal control practices on the actions of public administration. However, as discussed previously, there is a legal framework that subsidizes and enforces the supervision of municipal administrative actions carried out through an internal control system.

For Carneiro Júnior and Oliveira (2012), internal controls, in the context of public administration, have gained notability in recent years, especially with the advent of the LRF (Fiscal Responsibility Law), which forced federal, state and municipal governments to take greater responsibility for public spendings, in order to avoid public deficit or even having benefits and funds cut for interference in public money.

According to Soares (2012), the need to implement ICS in Public Administration structures is proven not only by its legal requirement, but also by the need to supervise and guide public management for the benefit of society.

The inadequate use of public resources, especially in the municipal sphere, often refers to the lack of an efficient and effective control in public management, which also causes the generation of debts that can affect the planning of these entities in the short and long term.

Almeida, Taffarel and Gerigk (2003) point out that managers who use control procedures have a tool that can help them in defining parameters to monitor the execution of revenues and expenses, and also allows the correction of distortions that may affect the objectives defined for the organization, whether they are deficiencies in the execution of expenses or even due to non-realization of revenues foreseen in the budgetary planning of the municipality.

This understanding is ratified by Ching (2006), since the author presents comptrollership as the area responsible for evaluating possibilities, elaborating policies, budgets, establishing control standards and structuring an information system to meet management needs.

According to Vasconcelos, Sampaio, Silva Neto and Duque (2012), comptroller offices become an important aid to municipal public management, since it helps municipalities to achieve efficiency, effectiveness and cost-effectiveness in order to ensure the transparency of the acts practiced by the public administrator.

This understanding is confirmed by Slomski (2001) when he states that in municipalities, the Comptroller Office manages an entire system of economic-physical-financial information, instrumentalizing managers to monitor the economic results generated from the activities.

Cavalcante and De Luca (2013) point out that the government's comptrollership has as basic pillars both transparency and accountability. Through these pillars, municipal internal controls tend to demonstrate the efficiency of their services through transparent accounts that justify the collection of the various taxes levied on the population (Pereira & Rezende, 2013).

In addition, Roehl-Anderson & Bragg (1996) point out that it is through this unity that managers are aided by consistent information, enabling them to make decisions aligned with the organization's goals. Kalife (2004) complements this idea by stating that Comptrollership has developed preventive control projects with the objective of making management transparent, reducing public spending and promoting the efficiency and effectiveness of municipal activities.

In this context, according to Scarpin and Slomski (2007), controllership assumes the responsibility of improving control mechanisms that help the organization reach the "optimal".

Therefore, it is necessary to implement municipal comptroller offices in order to assess the correct application of resources by managers of the various executive bodies comprehended by the municipal government, always observing the effectiveness, efficiency and cost-benefit of information (Cavalcante, Peter & Machado, 2011).

This need is ratified by Cruz and Glock (2003) when they assert that internal control in municipal governments must be exercised through an organizational structure (administration) with pre-established control mechanisms, which includes the provision of responsibilities, work routines and procedures for review, work approval and registration, from accounting and administrative aspects to environmental and cultural aspects.

Thus, it can be inferred that the objective of internal control is to act, simultaneously, as an aid mechanism for public administrators and as an instrument of protection and defense of collective interest, ensuring that operations are conducted in an economical, efficient and effective manner. Besides, it aims to safeguard public resources against waste, abuse, errors, fraud and irregularities, ensuring a good management of the treasury (Cavalcante et al, 2011).

It is worth to note that, according to Solle (2003), from an operational point of view, these organizational units help managers and, for that, they must be structured in line with the organization's mission. However, Thompson and Jones (1986) point out that it is verified in many cases within the public sector the directioning of these control bodies to the monitoring of budget execution.

On the other hand, Peter et al. (2003, p.8) argue that "public controllership assumes the existence of a participatory, continuous and integrated planning system", and plays a role in evaluating management results (Suzart et al., 2011).

To that end, Chiarelli and Cherobim (2009) emphasize that Municipal Internal Control is seen as a relevant organizational resource for decision making, generating benefits and savings for the sustainability of municipal public administration. Furthermore, it provides support and guidance regarding legality and cost-effectiveness in related areas, collecting various indicators.

Thus, it is observed the need to implement efficient control practices in the municipalities by means of an organizational unit, aiming at minimizing possible public resource embezzlement, as well as optimizing budgetary and financial execution, contributing to the improvement of public spending through the management of internal controls.

## 2. Methodology

The methodology considered to carry out this research was configured as being exploratory and descriptive. According to Gil (1999), exploratory research aims to present an overview of a fact that has not yet been explored in depth, while descriptive research seeks to describe the characteristics of a particular population or phenomenon or to establish relationships among variables. However, the main purpose of this type of research, according to Gil, is to promote the improvement of ideas. As a result of the objective established, field research was chosen.

With regard to techniques, both direct and indirect documentation were used. In the indirect documentation, bibliographical and documentary research were carried out. The direct documentation corresponded to extensive direct observation with the proposition of a questionnaire.

The structured questionnaire, used as an instrument for data collection, was made available via SurveyMonkey to the Central Internal Control Unit (UCCI) of the Municipalities of the State of Pernambuco, which can assume the denominations of Internal Control or Comptroller General. Secondary sources of data were the Brazilian Institute of Geography and Statistics (IBGE) and the National Treasury Secretariat (STN).

The research universe was established considering the municipalities that submitted Internal Control Report to the Court of Auditors of the State of Pernambuco (TCE / PE) in the year 2015, on the annual accounts for the previous year, contemplating 183 (one hundred and eighty and three) municipalities of Pernambuco. It is noteworthy that although the questionnaire was sent to the 183 municipalities, the analysis of the results was carried out considering those that had the questionnaire of the research fully responded. The questionnaire obtained 43 responses, achieving a response rate of 23.50%.

It is important to highlight that for the validation of the questionnaire, two techniques were used: focus group with specialists on the subject and pre-testing on a sample from the universe.

After data collection, these were tabulated using Microsoft Excel, in order to obtain the percentage distributions of the answers obtained. Later, in order to verify whether there was a relationship between the functions performed by the comptrollers and the characteristics of the municipalities, an inferential study was performed using the Statistical Package for Social Sciences (SPSS) 22.0.

## 3. Analysis of results

Based on data collected regarding the activities developed by UCCIs, it was verified that only 23.26% out of the effective universe of this study exert all the comptrollership functions. Thus, 76.74% do not perform all the functions, as shown in Table 1. Therefore, it was observed that despite the existence of UCCIs, there is still a long way to go for the actions carried out by these areas in order to

cover all essential activities for the effectiveness of the municipalities' control bodies actuation.

**Table 1. Performing of all Controlling functions**

<b>Performing all Controlling Functions</b>	<b>Frequency</b>	<b>Percentage</b>
No	33	76.74%
Yes	10	23.26%
<b>Total</b>	<b>43</b>	<b>100.00%</b>

(Source: Research Data)

In addition, it was verified that the internal control function is the only one exercised by the whole effective universe of the research, whereas the tax function is exercised by 53.49%, according to Table 2. This fact may suggest that the internal control function, often confused as being the only function performed by Comptrollership, is the most important and recognized by internal control professionals.

**Table 2. Controlling Functions Executed**

<b>Controlling Functions</b>	<b>Frequency</b>	<b>Percentage</b>
Internal Control	43	100.00%
Managerial Strategic	35	81.40%
Accounting	34	79.07%
Asset Protection and Control	29	67.44%
Risk Control	29	67.44%
Tax	23	53.49%

(Source: Research Data)

In another perspective, it was observed, when analyzing the amount of comptroller functions performed by UCCIs, that only 2.33% performed 01 function, while 23.26% performed 06 Functions, as shown in Table 3.

**Table 3. Number of controlling functions performed**

<b>Quantity of Functions Performed</b>	<b>Frequency</b>	<b>Percentage</b>
01 Function	01	2.33%
02 Functions	02	4.65%
03 Functions	08	18.60%
04 Functions	06	13.95%
05 Functions	16	37.21%
06 Functions	10	23.26%
<b>Total</b>	<b>43</b>	<b>100.00%</b>

(Source: Research Data)

In addition, it was verified that only 03 respondents execute up to 02 Controlling Functions, corresponding to 6.98%. Thus, it was verified that 93.02%, representing 40 respondents, performed from 03 up to 06 Controlling Functions.

These findings demonstrate the lack of uniformity in regard to effectiveness of the actions carried out by municipal control.

Aiming to verify the existence of a relationship between the functions performed by local comptroller offices and the characteristics of the municipalities of Pernambuco, an inferential study was carried out with the following variables: mesoregion, current revenue, population size, territorial area of the unit (km<sup>2</sup>), Human Development Index (HDI).

Initially, a normality test was performed to gauge whether the variable was from a population which present a normal distribution. As for quantitative variables, the Shapiro-Wilk test was performed. Among the continuous variables, only data referring to the variable "HDI" followed a normal distribution, according to Table 4.

**Table 4. Normality test for some variables of interest, considering whether municipalities have all controlling functions and the number of controlling functions**

Normality test		Shapiro-Wilk Test	
		Statistics	Degrees of
<b>Exercises all</b>			
Current Revenue	Yes	0,595	10
	No	0,516	33
Population Size	Yes	0,770	10
	No	0,480	33
Area of the territorial unit (km <sup>2</sup> )	Yes	0,668	10
	No	0,688	33
HDI	Yes	0,909	10
	No	0,939	33
<b>Quantity of</b>			
Current Revenue	Up to 02	0,985	03
	03 to 06	0,546	40
Population Size	Up to 02	0,930	03
	03 to 06	0,513	40
Area of the territorial unit (km <sup>2</sup> )	Até 02	0,868	03
	03 to 06	0,696	40
HDI	Up to 02	0,957	03
	03 to 06	0,963	40

(Source: elaborated by the authors)

Note: The significance level of 0.05 was adopted for testing.

For good performance of parametric tests it is required that the variances involved be homogeneous, making comparisons possible. Thus, we performed the Levene Test, since we compared the variances in groups of observations derived from continuous distributions. According to Table 5, it can be stated that the variances do not differ statistically among the variables "Current Revenue", "population size", "area of the territorial unit (km<sup>2</sup>)" and "HDI".

**Table 5. Homogeneity test on the variance for some variables of interest, considering whether the municipalities carry out all the controlling functions**

Variables	Method	Levene Test	g1	g2	p-value
Current Revenue	Based on Average	0,395	01	41	0,533
	Based on Median	0,062	01	41	0,804
Population Size	Based on Average	0,643	01	41	0,427
	Based on Median	0,212	01	41	0,648
Area of the territorial unit (km <sup>2</sup> )	Based on Average	2,969	01	41	0,092
	Based on Median	0,859	01	41	0,360
HDI	Based on Average	0,360	01	41	0,552
	Based on Median	0,458	01	41	0,502

(Source: elaborated by the authors)

Note: The significance level of 0.05 was adopted to the tests.

After checking quantitative variables for normality and homogeneity, the Mann Whitney non-parametric test was applied to analyze the variables that do not present a normal distribution, and the Student's t test to analyze the "HDI" variable, since it has a distribution within normality.

Table 6 shows that there are no statistically significant differences among the variables *current revenue*, *population size*, *area of the territorial unit* and *HDI* of the municipality, in relation to whether all control functions are performed.

**Table 6. Descriptive measures of variables considering whether municipalities carry out or not all control functions**

Variables	Performs all Control Functions	N	Average	Standard deviation	p-value
Current Revenue	Yes	10	116.305.618,01	172.039.383,57	0,605 <sup>1</sup>
	No	33	130.938.604,19	235.494.716,03	
Population Size	Yes	10	53.533,00	56.755,10	0,373 <sup>1</sup>
	No	33	66.462,12	131.657,34	
Area of the territorial unit (km <sup>2</sup> )	Yes	10	473,20	587,31	0,796 <sup>1</sup>
	No	33	363,81	380,64	
HDI	Yes	10	0,62	0,04	0,208 <sup>2</sup>
	No	33	0,60	0,05	

(Source: elaborated by the authors)

Note: 1- Mann Whitney non-parametric test; 2- Student's t test for independent samples; 3- The significance level of 0.05 was adopted for the tests.

Therefore, the study did not identify results that could verify if the variables listed in Table 8 influence the exercise of all controlling functions. From another perspective, it was sought to analyze if these variables influenced the quantity of controlling functions performed.

It was verified that, in relation to the quantity of controlling functions, municipalities with up to two controlling functions had lower averages of current revenue, population size, area of the territorial unit and HDI, but this difference was not statistically significant, according to Table 7.

**Table 7. Descriptive measures of variables according to the number of controlling functions performed**

Variables	Number of Controlling Functions	N	Average	Standard deviation	p-value <sup>1</sup>
Current Revenue	Up to 02	03	29.786.361,55	2.322.878,09	0,215 <sup>1</sup>
	03to 06	40	134.866.775,84	227.124.963,22	
Population Size	Up to 02	03	13.245,00	633,68	0,253 <sup>1</sup>
	03 to 06	40	67.221,13	121.615,07	
Area of the territorial unit (km <sup>2</sup> )	Up to 02	03	140,92	66,17	0,127 <sup>1</sup>
	03 to 06	40	407,87	442,17	
HDI	Up to 02	03	0,59	0,01	0,592 <sup>2</sup>
	03 to 06	40	0,61	0,05	

(Source: elaborated by the authors)

Note: 1-Mann Whitney non-parametric test; 2- Student's t test for independent samples; 3- The significance level of 0.05 was adopted for the tests.

Finally, it was verified whether the exercise of all controlling functions and the quantity of functions exercised were influenced by the mesoregion in which the municipalities are inserted. Therefore, the Likelihood Ratio Test was applied, since it was a nominal variable.

The municipalities of Recife metropolitan mesoregion that perform all control functions represent 42.9%, 12% in the mesoregions of Zona da Mata e Agreste, and 36.4% in the mesoregions of Sertão and São Francisco; and this difference was not statistically significant.

As Table 8 displays, in relation to the number of control functions exerted, only three municipalities in Zona da Mata and Agreste exercised up to 02 control functions and it was not possible to verify any statistically significant association with the mesoregion.

**Table 8. Distribution of the municipalities of Pernambuco by mesoregion**

Control Functions	Recife Metropolitan		Zona da Mata and Agreste		Sertão and São Francisco		Total	
	N	%	n	%	N	%	n	%
<b>Executes all functions</b>								
Yes	03	42,9	03	12,0	04	36,4	10	23,3
No	04	57,1	22	88,0	07	63,6	33	76,7
<b>Number of Functions</b>								
Up to 02	-	-	03	12,0	-	-	03	7,0
03 to 06	07	100,0	22	88,0	11	100,0	40	93,0
<b>Total</b>	<b>07</b>	<b>100,0</b>	<b>25</b>	<b>100,0</b>	<b>11</b>	<b>100,0</b>	<b>43</b>	<b>100,0</b>

(Source: elaborated by the authors)

Notes: 1- Likelihood Ratio Test; 2- The significance level of 0.05 was adopted for the test.

In view of the above, it was not possible to identify a significant statistical relationship between the control functions exercised and the characteristics of the municipalities, as well as between the quantity of control functions executed and the characteristics of municipalities.

#### 4. Conclusions

The objective of the study was to investigate the functions of the municipal comptroller offices of Pernambuco and whether there would be a relationship between the functions performed and the characteristics of these municipalities.

As a result, it was observed, as for the organizational structure, that the terminology *internal control* is the most frequent in the universe researched. Regarding the activities carried out by the UCCIs, they were grouped according to the respective controlling function, where it was found that only 23.26% of the actual universe of this study performed all the functions.

In this sense, analyzing the accounting function, it was observed that 79.07% of the municipalities reported to have it executed; regarding the managerial-strategic function it was found that this is contemplated in 81.40% of municipalities. When it comes to the tax function, it was verified that 46.51% executed it in the actions developed by municipal control, while the function protection and control of assets is performed by 32.56%. It should be noted that 100% of the respondents perform the internal control function. The risk control function was also analyzed, which is contemplated by 81.40% of the respondents.

As for the existence of a relationship between the functions performed by the comptroller offices and the characteristics of the municipalities, it was observed that there are no statistically significant differences between the variables *current revenue*, *population size*, *area of the territorial unit* and *HDI* of the municipality, in relation to whether all control functions are performed. In addition, the study also

failed to verify a statistically significant association with the mesoregion in which the respondent municipalities of the research are inserted and to the amounts of controlling functions executed. However, municipalities with up to two controlling functions had lower averages of current revenue, population size, area of territorial unit and HDI, but this difference was not statistically significant.

Finally, it is recommended to apply the research on the same municipalities in the future, seeking to identify whether there has been an evolution on the results; or in other States, for comparative purposes.

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