THE VALUE OF PUBLIC AUDIT - THEORIES AND EMPIRICAL EVIDENCE

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Abstract
This study is a review of the main issues in public audit. The theoretical concepts of operation, organizational differences, national and regional peculiarities, visions of specialists in the field, etc. are investigated. Practically all states in the world have institutions or commissions with the ability to check the bodies that work with public money. There are three basic models based on which any superior entity in the public audit functions: Westminster, the board of administration, and Napoleonic. Obviously, variations may appear. However, there are more and more trends of structural and functional similarity of higher institutions. Their sources are classified into three types of isomorphism: coercive, mimetic and normative. For a deeper analysis, we did not limit ourselves to findings of the structures, but we even addressed the theoretical bases of the necessity or value of the public audit. Within the broader framework of neo-institutional theory, we have reviewed six economic and administrative theories that could explain the demand for public audit: agency theory, signal theory, assurance theory, management control theory, governance theory, and confirmation theory. In order not to remain only in the strictly theoretical framework, we also discussed the opinions of specialists working in the field, expressed through a questionnaire administered by the International Organization of Supreme Audit Institutions. The conclusions try to foreshadow some future trends in public audit, under the pressure of current economic transformations.

Keywords
public audit, neoinstitutional theory, agency theory, signal theory, management control theory

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Introduction

In most of the world's states, central institutions have been established and are operating with the sole or main purpose of auditing the multitude of central, regional and local public institutions (World Bank, 2001). Moreover, there is an international organization that many countries have joined, called INTOSAI (International Organization of Supreme Audit Institutions). It established two basic principles to be followed by affiliated national member institutions: (1) ensuring the provision of quality and efficient public services by public administrations and (2) supporting fair and efficient governance (INTOSAI, 2004, Cordery & Hay, 2020).

The design of national top institutions responsible for public audit is very different. Differences may refer to the organizational chart, attributions, transparency, etc. Especially in poorer countries, the creation of these control institutions is supported and monitored by INTOSAI and the territorial or continental centres of this international entity (Cordery & Hay, 2020). To better understand the principles and functionality of national institutions, the motivation of the audit of administrative bodies, effective operating mode, etc., we will review the international situation in this field. We will also refer to the typology of control and audit activities, but also to the institutions that are subject to audit, and which are the object on which the central institution focuses its efforts on. We also evaluate the economic and administrative theory that explains the motivations for the existence of the public audit request. The conclusions try to foreshadow some future trends in public audit, under the pressure of current economic transformations.

The rest of the paper is organized as follows. The next section refers to the description the theoretical background of the ways of organizing public audit institutions, typology of auditing activities and theories of the value or necessity of public audit. Then follows the methodology and data, results and discussion section. The paper ends with conclusions including limits and propose for further studies to cover these limits.

1. Review of the scientific literature

1.1 Ways of organizing public audit institutions

The first typical model is the one in Great Britain, because the first national institution dedicated to this purpose functioned there, with legislative provisions, norms and well-defined objectives. It is referred to as the Westminster model, where there is a clearly defined institution with an absolutely independent status (Pollitt and Summa, 1997). Reports drawn up by the authorized institution are discussed and analysed within a parliamentary committee in charge of the accounts of public institutions. Variants of this British model (Cordey & Hay, 2020) are being implemented in Northern European countries. They initially functioned within central government institutions, even within relevant ministries, but had great freedom of action. Over time, the supreme control bodies have completely separated from the national central governments of these
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countries. Their activity is also reported to special parliamentary committees. Currently, the Westminster model works in most countries of the former British Empire, but it has also spread to other countries, even from Latin America and Eastern Europe (Ferry & Ahrens, 2022). The second type as a geographical spread is the model of the board of directors. For this institutional type, a single institution, as in the case of the previous model, is replaced by a council. Here, the highest audit institution is required to report its work to the government body, which then reports to the parliamentary institutions. Some original versions are also possible, like in Norway (Arthur et al., 2012, Cordery & Hay, 2020), where subordination is made directly to the parliament. Other variations are found in other European countries. The European Court of Auditors does not belong to any member state of the European Union but is pan-state. Its major task is the auditing activities of the institutions and bodies of the union. A third type of organization is the Napoleonic one. It is mainly found in French-speaking countries, but also in some countries in the Centre and South of the American continent. The composition of such a Court of Accounts primarily includes magistrates, but also other persons with studies and primarily legal tasks. Here, the power of the institution is very high, often the corresponding judges are not fixed for a specific period, but can be appointed indefinitely, for life. A custom of this system is that members have a very high level of education (Morin, 2016). Classified as belonging to the Napoleonic system are, for example, France, Turkey and Greece (Johnsen, 2019).

But there are also many common elements of the three systems. We recall, for example, the fact that in some countries since their establishment, and in others more and more, the independence of these supreme auditors vis-à-vis government institutions has to be respected. This principle is tried to be respected both regarding the choice or appointment of staff, but also the sources of income for the financing of officials and salaries (Clark et al., 2007). The specialized literature, both on the basis of administrative theory and empirical observations from various countries, believes that the most effective implementation of the mentioned principle leads to a higher quality of audit activities. However, in many cases, there are also criticisms and recommendations from theorists and practitioners of institutional designs (Cordery & Hay, 2020). Since in many countries, reformation is hampered by national customs, attempts are being made to implement the best principles in the functioning of European and international bodies.

1.2 Typology of auditing activities

Activities of any institution cannot be dissociated from the mission and objectives declared by their statute. If reporting is done only to the legislative institutions, activities have a predominantly technical character. In other systems, there is the concept that a wider spectrum should be served with such information, for example economic agents, budget contributors or the general public. For these situations, reports are less technical, therefore more explanatory, for a wider audience. Synthetically speaking, we can identify three types of auditing: compliance, financial statements and performance. In general, they assess the already past activities that concerned the situation before the actual audit. Their role is to evaluate the degree of compliance with the spending policies of the
available funds, in particular to ensure that there is a compliant spending framework. Some activities prior to the actual audit still retain important weight in some countries in the Balkans, but also in some places in Western Europe, for example in Belgium (Cordery & Hay, 2020, Corten et al., 2018). Other activities that may fall under compliance are those carried out in relation to private enterprises if they are engaged in economic and financial relations with the public sector. Financial audit is carried out to guarantee the ethics of the funds available to public bodies. More precisely, it is about ensuring that the allocation of funds, practically the spending of the amounts from the budgets is done in a correct manner. In addition, it is checked whether the financial statements of public institutions are exactly reflected in the relations between the different public employees. The higher national audit institution expects and encourages public institutions to organize an internal audit themselves, and to involve their own staff in this process (Sterck & Bouckaert, 2006). Obviously, there is a system in which this internal audit is then controlled by an external one carried out by the national public auditor. As a long-term trend, auditing has gained increasing emphasis in order to verify the performance and efficiency of spending funds (Pollitt and Summa, 1997). As a consequence, nowadays the auditing of the performance of public organizations and institutions has become more clearly institutionalized and legislated (Bonollo, 2019). Gradually, the performance audit activities have diversified and include, among others, audits of operations, management and management and those that can be framed in the evaluation of the price in relation to the quality of the services provided. The actual ways in which these audits are carried out differ significantly from one country to another in relation to the legislation of the powers of the supreme auditing body. In some cases, performance evaluation is done as an integrated financial audit activity related to compliance. In other cases, instead, there are specialized departments that are in charge of exclusive performance audits and precise aspects related to the efficiency of the processes carried out in institutions with an administrative role are targeted (Cordery & Hay, 2020). Performance auditing is constantly subject to change, due to the continuous restructuring of the economy. The development of public-private partnerships or public sector development initiatives with private funding sources bring specific auditing activities (Corten et al., 2018). This type of audit can even lead to changes in public, economic and administrative policies (Raudla et al., 2016). The views of those working in public audit show that there can be contradictions between the goals dictated by accountability and compliance and those dictated by performance enhancement. Despite this difficulty, auditors consider (Morin, 2016; Raudla et al., 2016) very necessary to audit performance.

1.3 Theories of the value or necessity of public audit

The fundamental theoretical aspects of the need for public audit can be identified in the economic and administrative literature. Motivational variety, its dimensions and similarities between national systems are addressed. There are motivational comparisons that come from private auditing and its values. In addition to specific examples from various countries, we will also evaluate the results of an INTOSAI survey (Shafiee Moghadam et al., 2021) for more empirical evidence. In order to highlight the similarities
and differences between various systems, we use the term isomorphism to refer to structural similarities, objectives and activities. The analysis framework assumes well-identified theories, such as the neo-institutional one (see for example Azzali et al., 2021). Several theories can be analyzed to assess audit value (Cordery & Hay, 2020): agency, signaling, assurance, management control, governance and confirmation. Other theoretical explanations are also identifiable, such as Moore's public value model (Mintrom & Luetjens, 2017). The theories of public audit derive from the corporate governance theories and enhance the preventing role of audit (internal or external) in detecting the risk of fraud within the organization according to The International Standards on Auditing. The great financial scandals of WorldCom, Enron, Parmalat that broke out in the early 2000s were based on financial manipulations with complicity with audit firms in order to hide the problems faced by these entities (Achim & Borlea, 2020, p. 122).

**Neo-institutional theory applied to public auditing.** This theoretical concept appears for the first time in an article by DiMaggio & Powell (1983). Synthesizing to the fullest, this theory investigates the similarities and divergences between participatory institutions and organizations, both in structure and in terms of objectives and activities. The theory was later adapted for the study of various economic, social and administrative fields, even for the ways of accepting international accounting standards in several states of the world (Wijekoon, 2021). Whatever the field of use, neo-institutional theory states that the main rule is that a set of norms and conventions dictates the actions that are then taken by both individuals and institutions and organizations. The original article by the two authors of the theory shows that there are three fundamental forces that cause the convergent tendencies of institutions: isomorphism of coercive type, mimetic type and normative type. Initially, institutions focus on maximizing the effectiveness of their own actions, but the paths found are different, which cause severe dissimilarities. Later, a need for recognition and legitimation is manifested, and thus isomorphisms act that lead to structural and functional standardization. It has been noted that public institutions are more subject to isomorphic pressures than those in the private, competitive environment (Kimeny & Mbaku, 2019). Coercive isomorphism has as its source the political environment, which practically forcibly imposes similarities and the desire for recognition and legitimacy. Mimetic isomorphism has as its source the logical similarity with which institutions adequately respond to a changing environment. Normative isomorphism has as its source professional standards, which in turn have job similarities. The predominance of a certain type of isomorphism leads to structures, objectives and activities specific to it (Pillay et al., 2017). In general, a certain type of isomorphism corresponds to a certain specific or at least predominant behavior. For example, coercive isomorphism is most often connected with recognition and legitimation, but these are also sometimes identified as sources for the other two types of isomorphism, namely mimetic and normative (Martínez-Ferrero & García-Sánchez, 2017).

**Agency theory** is the most common explanation for the value (necessity) of public audit. It is the side of theoretical economics that evaluates as analytically as possible the possible
consequences of the problems of the principal-agent relationship (Maggetti & Papadopoulos, 2018), especially if they occur within the same institution, organization or private or public enterprise. That is why the concept is particularly widespread in theories related to the structures of organizations. The broadest definition of an agency relationship refers to "a contract by which a principal (a person or an organization) engages another person to perform on his behalf a task that involves a delegation of decision to the agent" (Jensen & Meckling, 1976). The theory is specifically concerned with the situation in which the principal hires or recruits an agent under conditions of univocal or biunivocal information asymmetry or under conditions of incomplete information. The application of agency theory in public auditing is based on the premise that it has value because it reduces the costs borne by the agency. Practically, this mechanism constitutes the basis by which the estimation of the value of the audit for public funds is attempted. It can be stated that there is a principal-agent relationship in the case of auditing if the principal makes a delegation to the agent for control over some of its resources (Cordery & Hay, 2020). For example, in the private sector one can identify such a relationship between the shareholder, who is the rightful owner, and the manager who has the delegation to manage the enterprise with its resources. The mechanism can also be explained and applied in the case of the public institutions sector. Always when we can talk about an agency relationship there are also costs associated with this relationship. For example, it would be possible for the agent to use agency resources for personal purposes. Also associated with a cost is the situation in which the agent does not fulfill his assigned tasks. Agency costs also occur if the agent is well-intentioned but does not act in the right direction. Various connections of agency theory with public audit institutions, and sometimes even with financial reporting and their intrinsic value, have been addressed in the economic literature (Bradbury & Scott, 2015). When public pressure or citizen expectations also come into play, an agency problem is all the more identifiable (Tyson, 2018). These interventions by tax-paying citizens, non-governmental organizations and other components of civil society lead to the premise that in the public sector principal-agent relationships are much more elaborate than in the private economy.

**Signal theory** is connected with agency theory and the principal-agent relationship, in which one of the participants, generally the agent issues information about himself or his activities to the other participant (generally the principal). Initially, signaling theory was designed to account for the information asymmetry found in many cases between an institution and its employees (e.g. Taj, 2016). Compared to the original purpose (Spence, 1973), the theory has undergone variations, being later used in other economic and social areas, from which applications appear most frequently in the capital market (Michaely et al., 2021), relations between business partners (Bojovic et al., 2018) and collaboration and subordination relationships in human resource management in private enterprises (Taj, 2016). Empirical studies on signal theory in different countries have also been conducted on the accounting and auditing sector in general and on the relationships of these institutions in particular. It has been investigated the purpose for which certain institutions that carry out activities with public money, insist on observing compliance with the incentives related to the signal theory (Appuhami, 2018). In these studies,
elements of the signal theory were practically highlighted in the public audit of the various exemplified countries. Particular attention was paid to the supreme audit institution in the UK, showing that it is an entity that operates with a very high degree of independence. In addition, it provides a guide to measures on the evaluations of controlled central, regional and local administrations. It is thus shown to the general public, through public reports, that the organization is competent in auditing public money, but also a performance provider, through the competence audit. Interesting hypotheses are also launched for the case of economic aid coming from abroad. More precisely, it is being investigated (Lamoreaux et al., 2015), if and to what extent this assistance, especially coming from financial bodies, is correlated in size and structure with the quality of financial standards and reporting in the beneficiary country.

Insurance theory suggests that auditable entities sometimes want to be audited because they might hedge against potential losses, or recover some of them if they occur. In practice, the auditor could be used as a shield in case of possible losses from investment activities, being used even in the case of legal disputes of a commercial nature (Ghosh & Tang, 2015). This perspective can exist, even if, through the audit act, the auditor assumes zero or very low responsibility in case of possible financial losses of the audited entity. Beyond legal assurances, there is the possibility that an audited entity may want political assurance. National, regional, or local level institutions may want an audit, including performance, to blame failures due to poor management on the public or private auditor (Samsonova-Taddei & Humphrey, 2015). These considerations are currently only at the level of presumptions in the economic literature, some authors (Cordery & Hay, 2020) being of the opinion that these mechanisms may be true, but need factual confirmations or demonstrations. They have only been sporadically highlighted in the Australian and New Zealand systems.

Management control theory. The mechanisms that generate audit demand from the public sector can sometimes be borrowed from the private sector. The managements of some private companies may want audits carried out in their enterprises to control some processes that they themselves cannot control. We can talk about a control of the own management, so the benefits are in favor of the own organization, of the way it works. A parallel can be drawn to this mechanism implemented in the public sector (Volkova et al., 2017). Situations with great similarity can arise in cases where state authorities with an executive role or high-level political leaders consider it necessary and formulate a request for an audit (Ellwood & Garcia Lacalle, 2016). Its main purpose would be a control of the management of a government organization.

Governance theory. It would be possible to understand that a quality management of the organization, be it public or private, can get rid of the audit. In reality, however, there seem to be relations of complementarity between the two, not of substitutability. This fact is demonstrated by some empirical findings, for example by the fact that there is a higher demand for auditing activities, especially for performance when the good governance objectives of public and private organizations are more clearly defined. There is also an increase in the demand for audits, both for compliance, but faster for the performance one.
Although the source of inspiration is private organizations, some inherent specificities appear in the public sector. These are primarily due to conceptual differences in governance between the two sectors. Conversely, some mechanisms of the market economy seem to work logically in the public domain as well. For example, public organizations that request an audit, but also have profit-making objectives, are subject by auditors to higher tariff scales than those that do not have the right to make profits, but are directed exclusively to the interest of tax-paying citizens (Mohammad-Rezaei et al., 2018). In general, the presence of audit has been shown to increase good governance, both for public and non-public entities.

Confirmation theory is not yet fully consolidated in the literature and unanimously agreed by specialists in economics and administration, being more like a hypothesis. According to it, publishing and popularizing past economic and financial results by organizations also has an audit-related purpose. If these reports refer to previous time periods, it can be intuitively assumed that this information has already had an effect on the increase or decrease in company prices or the perceived value of the company if it is not publicly quoted on a stock or over-the-counter market (Rashid, 2020). So, it is not the information already published and with a certain history already known to the public that has an impact on the market, but rather the current ones, which show much greater sensitivity in relation to the price (Cordery & Hay, 2020). Through the confirmation hypothesis, a complementary relationship can be established between a set of non-public information, held only by the management of an economic entity but which are likely to produce effects on the market, and the results of subsequent related audits. This hypothesis can be given credibility if we want to reveal that auditing activities are important in circumstances where the information held by the management of the entities is used very intensively, and it is precisely the unaudited information that is more likely to produce greater effects on the market (Cordery & Hay, 2020). These mechanisms are complex and still leave room for much speculation, which would require more attention in the literature in further studies.

Other theories of public audit are related to other theories of corporate governance such as theory of moral hazards, stewardship theory, stakeholder theory, resource dependence theory, transaction cost theory and political theory. Later, to these theories was added ethics theory, information asymmetry theory or the theory of efficient markets. (Borlea & Achim, 2013).

2. Research methodology

In the theoretical approach, we firstly used the economic and administrative theory from the economic environment and secondly different empirical studies to support it. All these considerations came from academic specialists who are accustomed to a certain view of a field. To complete the level of information, we propose to conduct an empirical evidence regarding the value of public audit. For this purpose, we also resort to the opinions expressed by employees and members of the management of the supreme
national institutions that act in public audit. The necessary data was obtained with the support of INTOSAI, which carried out an extensive survey among high-level public auditors. Responses were received from over thirty INTOSAI member countries. To test the exposed theories (agency theory, signal theory, insurance, etc.) questions were formulated in the questionnaire. The central objective of the study is to assess the motivations for the audit request.

3. Results and discussions

Figure no 1 synthetically shows the main motivation chosen by the auditors, if they are put in the situation to choose only one, the one they consider the most important.

![Figure no 1. The theoretical motivations of the demand for audit](source: own construction according to INTOSAI data)

There is a clear predominance of agency theory, which dominates the ranking with 33% of responses. In the applied questionnaire, a justification of the choice made by the auditors was also requested. Among these, a few main explanations can be summarized: (1) if results following the audit are made public, being able to be consulted will increase the compliance, correctness and responsibility of the use of public money by the managements of the audited entities; (2) the situation in which the national or federal legislative body wants to be audited in order to keep under control, within the limits imposed by the fundamental law, the executive power. Although these arguments seem very strong, there was also strong support for two other motivations, namely management control and corporate governance. Examining the situations in which these answers were given, a high frequency was observed related to cases where there is strong...
decentralization, and in the public domain these circumstances are often encountered. Consequently, such a large volume of opinions favourable to corporate governance cannot be ignored and as a result, this theory regarding the audit request would require further evaluations for better elucidation. In contrast, the situation is fundamentally different in signal theory. This was largely ignored by survey respondents. The situation is even worse if we refer to the other two remaining theories, that of assurance and that of confirmation. However, their related frequencies are not zero, showing that they also have some followers among the auditors of the supreme institutions. In addition to the six theories circulated in the literature, other aspects were also investigated. One of these refers to the fact that the opinion makers regarding the need for the audit request are predominantly located on the national territory or not. But the idea was strongly rejected, the main arguments being in favour of external influences, pressures and behaviours borrowed from external financiers as the main source, especially international institutions that provide grants or loans.

Conclusions

Although we managed to identify some sources that deal with the issue of public audit, there are still opinions that say that the field is still poorly researched in relation to other economic fields. They refer rather to the insufficiency of examples, to the relatively small number of countries in which serious studies have been carried out compared to the totality of the states of the world. The functional variation of the supreme institutes in relation to the national legislations, the forms of government, the efficiency of the government, standard defined national cultural values, corruption phenomena or other macroeconomic aggregates that can be constituted as determinants should be studied. In theoretical exchange, the field is well covered, with own or borrowed institutional theories. It would be useful to consider possible parallelisms more consistently in the future, both as form of organization and as goals and activities. It is also interested in following the public value, i.e. the impact of the public audit in society. There is still little research that evaluates the relationships that exist between the quality of audits and the price of this service provided to public institutions. However, the research manages to present in a structured way the problems faced by this field, in order to be able to be used as a starting point for subsequent, more specific studies. It remains to be seen whether the isomorphic trends, across the three forms, will continue in the future, although we have noted these trends from the past to the present. The incentives for these processes can be further given by different factors: the intensification of international financing in the form of economic aid or in the form of structural, development and cohesion funds; increasing collaborative relationships with the private environment from which professional norms and habits can be borrowed; cost structures of the operation of public institutions; and so on. Future influences could also come from organizational structures of public institutions in general, changes in private and public managerial behaviors; variations in the authentication needs of the public auditor, the audited institution or the government. All these trends and factors can theoretically fit into one of the six theories already analyzed. Theory alone cannot explain the variations encountered in practical administration and
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Consequently, we consider that it is necessary in the future to compare in detail public auditors from various states for a more complete approach that combines the theory with the practice of public auditing.

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