

Internal Control and Its Application in Public Management: a Literature Review

LIDIA MARGOT TAPIA CACHAY

Cesar Vallejo University, PERÚ

ORCID: <https://orcid.org/0000-0001-7167-5986>

GUALTER COUTO

School of Business and Economics and CEEAplA

University of Azores

9500-321 Ponta Delgada, Portugal

PORTUGAL

ORCID: <https://orcid.org/0000-0001-5560-5101>

PEDRO PIMENTEL

School of Business and Economics and CEEAplA

University of Azores

9500-321 Ponta Delgada, Portugal

PORTUGAL

RUI ALEXANDRE CASTANHO

College of Business and Economics, University of Johannesburg

PO Box 524, Auckland Park

SOUTH AFRICA

Abstract: Currently, having a transparent and orderly public institution is related to the public policy of modernization of the state, which is not easy because it requires managers who have the will to implement an internal control system that allows the efficiency and effectiveness of the acts of the entities. The internal control in recent years has greater relevance seeking that the state entities are strengthened through new processes and changes of actions that allow transparency and achieve the objectives set and have an efficient management with a level of security of their administrative acts. The objective of this research is to study the simplification of actions and administrative transformations in public management through internal control. The methodology used for the literature review was descriptive, a search was made through the Scopus database, obtaining general data of 24 records, a not very significant number for the topic addressed, which has been subjected to bibliometric analysis that allowed to determine that the growth of publications from 1977 to 2020 has had an insignificant growth, having been accentuated in 2 publications from 2019 to 2020, likewise the greatest number of researches have been carried out in undefined countries, followed by Portugal, United Kingdom and United States, being the article the publication medium that has the greatest significance and the area that stands out most in publications is the social sciences followed by the economic sciences. Likewise, the Vos viewer was used to obtain the study map and the heat map of the Internal Control and Public Management theme. From the analysis, the theories related to the paradigms of internal control and public management have been analyzed, which will lead us to understand the changes or actions that public entities have or have had.

Keywords: Internal Control, Public management, Public Administration.

Received: July 5, 2021. Revised: December 21, 2021. Accepted: January 15, 2022. Published: January 16, 2022.

1. Introduction

Internal control, in the world for decades has been considered as an accounting tool to verify or examine; over the years this has been evolving, especially after various financial scandals due to inefficient management of the companies involved, currently there is a broader understanding and it is necessary that a change of ideas, as referred by Miaja Fol [1] the cultural change, of the new generations of public administration servers, familiar with the novel reforms must understand internal control, incorporating a more open management (P.98), which will allow preventive actions to prevail.

In our country, the changes began in 2006, for which Law No. 28716 was enacted (Law No. 28716, 2006. [2] Law on Internal Control of State Entities. Diario el Peruano) [3], as well as publication of the general rules of internal control (Comptroller's Office Resolution No 320-2006-CG, 2006. Diario el Peruano) and the directive of No. 006-2019-CG/ INTEG Comptroller General of the Republic [4], through the aforementioned devices regulates the development, approval, implementation, operation and improvement of internal control and its scope of application is mandatory for State entities and is supervised by the Comptroller General of the Republic.

In this regard, in the research on the impact of internal audit in public management, they found that compliance with standards; procedures and laws contribute to the executing body to have better decision-making capacity [5].

Control is necessary in public entities because it is timely, and appropriate for the achievement of the objectives, in that sense Mendoza Briones [6], relates that administrative management has a systemic condition, being the one that leads the actions aimed at achieving the objectives

through the fulfillment of the classic actions of management in the administrative process: project, organize, lead and monitor.

Compliance with the implementation of internal control, although it is a system to be applied by public sector entities, also has a mandatory nature in relation to the legal tools that guide the activity [7].

As there is adequate internal control in public entities, good governance will be achieved. In this regard Jabatan Perdagangan [8], emphasizes that the elements for good governance incorporate financial resources, asset management and mainly to ethical leadership.

The present research work on internal control and its application in public management is basic level, which aims to establish the current state of development of the subject under study.

The research problem is to determine whether internal control and its application in public management achieves the strengthening of the areas that have weaknesses and achieve the improvement of administrative management and its adjustment to the standards of modernization of public management through mechanisms or guidelines that make it possible to make officials and servers more agile procedures resulting in the use of public funds more efficient and management by results for the benefit of the population, in that sense Ujkani [9] notes that the implementation and progress of internal control in management actions plays an important role in providing financial management with transparency, efficiency, soundness and effectiveness in public sector entities.

Similarly, in the opinion of Neyra Torres [10], the presence of fragile internal control or a control that does not work properly does not help to consolidate the administrative systems and operations of the entity, contributing to the failure to achieve the desired objectives and goals.

The research is justified in the variable of internal control as revealed by Gamboa Poveda *et al.* [11], the internal control that has been identified as an instrument for the management of any organization, achieve a reasonable security for the achievement of its institutional objectives and is able to participate on its mission to the people interested in it. and the variable of administrative management that has an impact on servers and officials as noted by Lozano Valqui & Tenorio Aguinaga [12], that those responsible for developing the process of internal control in the organization is the Management in which also has the participation of the Directorate and Management which will have a direct impact on the workforce of the entity, this control is focused so that the entity provides or facilitates sufficient information that lead to the achievement of mission or institutional objectives.

The study through the review of the theoretical and methodological development aims to analyze the effectiveness of internal control in improving the management of public entities.

2. Methodology

The study was advanced in two phases, the first reflects the analysis of the bibliometrics of Internal Control and its application in Public Management, and the second is based on the methodical review of the most notable literature on the phenomenon being investigated.

In bibliometrics, in order to make an impartial and concrete evaluation, bibliometric indicators are used, which provide quantitative data in the evaluation. These indicators are numerical data with calculations based on the bibliographic peculiarities analyzed in the literature published in the academic and scientific world, which allow the analysis of various features of the scientific task, which are linked to the production and consumption of information [13].

Palomares and Chisvet [14] wrote: Bibliometrics is defined by its strict

rigorousness as the research possesses a concrete objective, a tactic for searching in a specific way which includes the ordered or systematic location of usable information for the research.

This methodology is being used more and more frequently to examine the state of the problems being researched, which allows us to know the categories of analysis in which the authors predominate, the most outstanding authors, the areas of knowledge in which they are interested, the countries in which the research is developed, types of publication and institutional affiliations of the authors.

For bibliometric analysis, a large amount of bibliographic information is needed. Generally, a bibliographic database is used for this purpose. These databases are made up of a set of records with bibliographic information (author, title of the contribution, publication, date of publication, publisher...), stored and managed by computer systems.

In order to assess the state of internal control research and its application in public management, it is necessary to have a vast bibliographic information for bibliometric analysis. As a general rule, a bibliographic database is used. These databases are made up of a series of records containing bibliographic information (author, article title, publication, date of publication, publisher,) which are accumulated and managed by computer systems [15].

For the approach of the topic and considering the bibliometric use in other studies, the SCOPUS database has been considered, in which the topic of Internal Control and its application in Public Management is examined, using the search argument for the inquiry. The search system used is (TITLE-ABS-KEY ("internal AND control") AND TITLE-ABS-KEY ("public administrations")) and was applied in July 2021.

In the search process 24 records have been located, which have been downloaded and subjected to bibliometric analysis, considering the categories of author, the

following categories have been considered: by institution, author, countries, by type of document, by sponsor, source, areas, years of publication and also in the map of the study, highlighting topics such as accountability, public administration, public sector, risk management, control activities, accounting, among others, which are linked to the topic under study.

The data was exported in comma-separated format, which made it possible to incorporate the information into the VOS Viewer program with which the analysis of co-occurrences of key terms was carried out, as an exploration of the subject matter associated with Internal Control and its application in Public Management.

Likewise, we have reviewed the statistics generated by authors in which only 2 authors appear with 2 publications, the rest only one publication; by country, we have found that in Portugal there have been 3 publications, in Russia, Spain and United Kingdom, there are 2 publications and in Brazil, China, India, Indonesia, Malaysia, Romania, Mexico, Serbia, Turkey and United States there has been 1 publication and we have 5 publications not defined by country and by source it has been shown that Public Administration Review has 2 publications, the following 20 sources only have 1 publication.

For the analytical review of the most relevant documents of the data, full-text readings have been carried out, which have made it possible to identify categories such as theoretical approaches to the phenomenon, theoretical models, methodologies, and factors that influence internal control applied to public management.

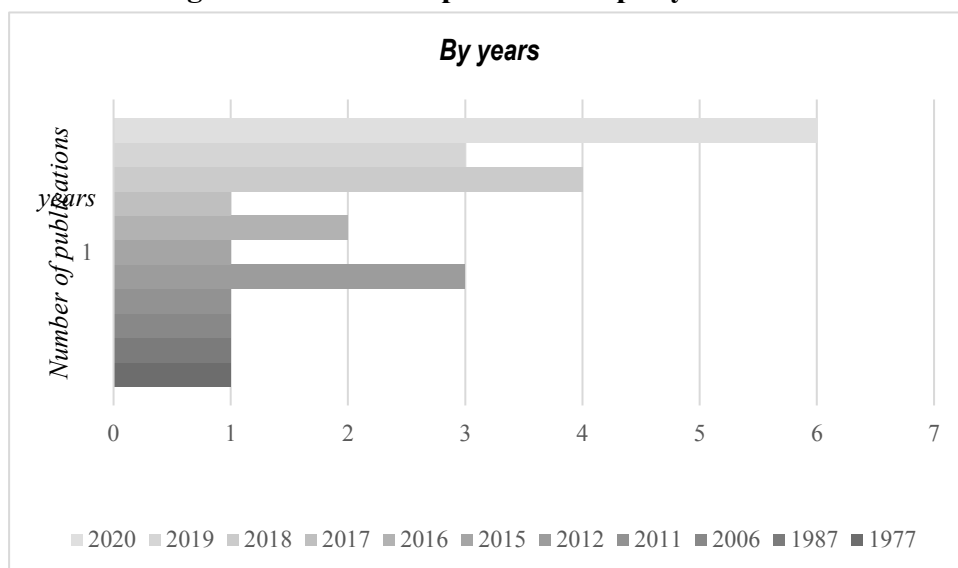
3. Results and Discussion

Through the methodology it has been possible to identify 24 researches, showing that since 1977, as shown in Figure 1, there are publications on Internal Control and its application in Public Management, having had an insignificant increase, with only 6 publications until 2020.

Through the methodology it has been possible to identify 24 researches studies, showing that since 1977, as shown in Figure 1, publications on Internal Control and its application in Public Management have begun, with an insignificant increase, with only 6 publications up to 2020.

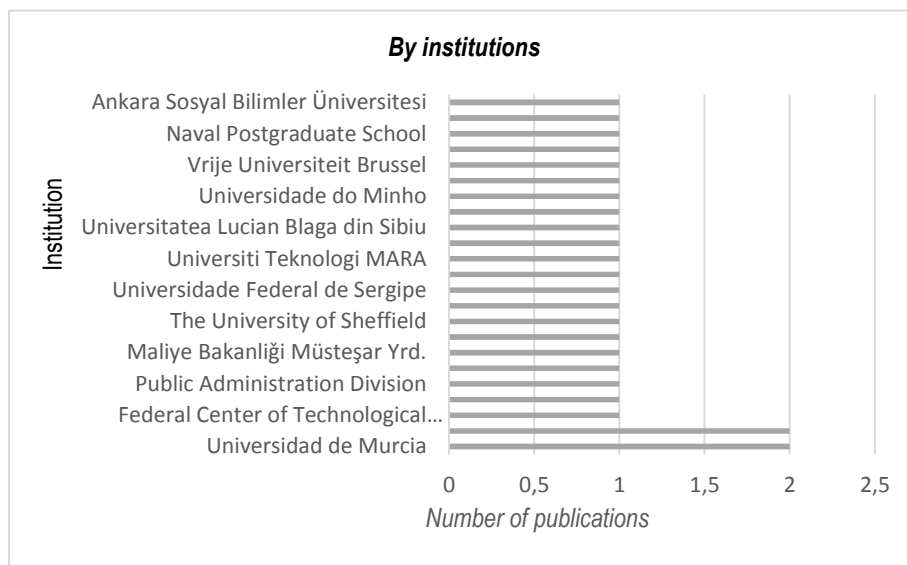
Since 1977 it has taken 10 years of space for a new publication in the year 1987, then 19 years for a second in 2006 publication, then reducing the period between publications and it is from the year 2015 that publications have been made for each year until 2020..

Figure 1: Growth of publications per year



Source: Scopus database

Figure 2: Publications by Institution



Source: Scopus database

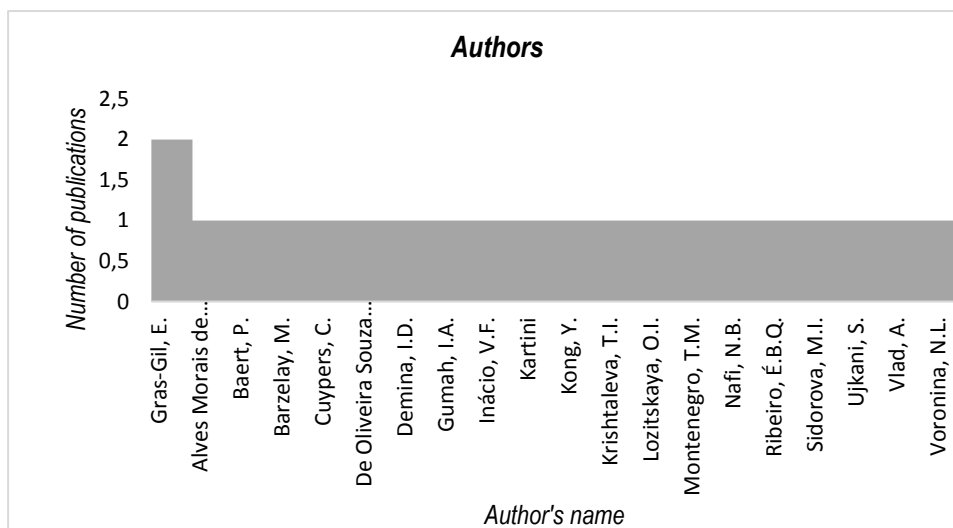
It shows the publications by institution in Figure 2, which highlights four universities that associate the theme of internal control and public management, which are: Naval Postgraduate School, University of do Minho, Universiti Teknologi MARA, The University Of Sheffield and University of Murcia, and exceptionally makes its appearance Public Administración Division, which is a specialized research or teaching division.

E and Alves Morais with 2 publications, the rest of the authors only have 1 publication.

The results of the authors who address internal control in public management are shown in Figure 3, highlighting with 2 publications Gras-Gil, E and Alves Morais, the rest of the authors including Baert,P, Barzelay,M, Cuyper, De Oliveira Sousa, Dermina, ID, Gumah,I,A, Inácio, V.F, among others have only 1 publication.

The results show the authors, which are expressed in figure 3, highlighting Gras-Gil,

Figure 3: Main Authors of Internal Control and Public Management

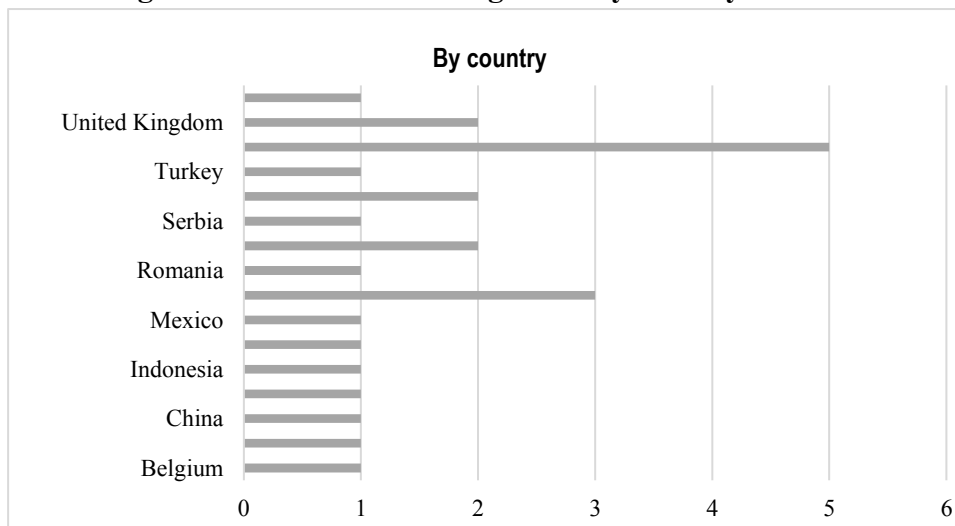


Source: Scopus database

To be able to establish the place of origin of the researches related to the approach it was considered to be carried out by countries, as it observes from Figure 4, they head the classification with 5 productions in places not defined by country, followed by Portugal that has 3 publications, followed by United

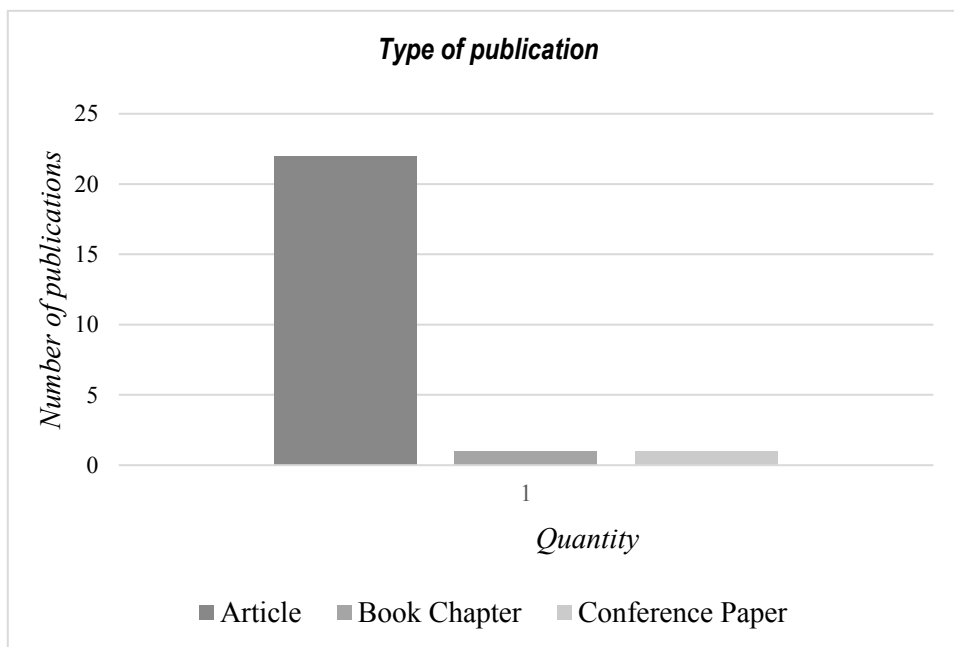
Kingdom, Spain and Russia with 2 productions, the rest of countries have a production of 1, among which are United States, Turkey, Serbia, Romania, Mexico, Malaysia, Indonesia, India, -China, Brazil and Belgium, which implies that the subject of study does not have much approach.

Figure 4: Number of investigations by country



Source: Scopus database

Figure 5: Main publications



Source: Scopus database

Figure 5 shows that scientific research related to Internal Control and Public Management has a publication ranking of more than 20 articles, followed by 1 book

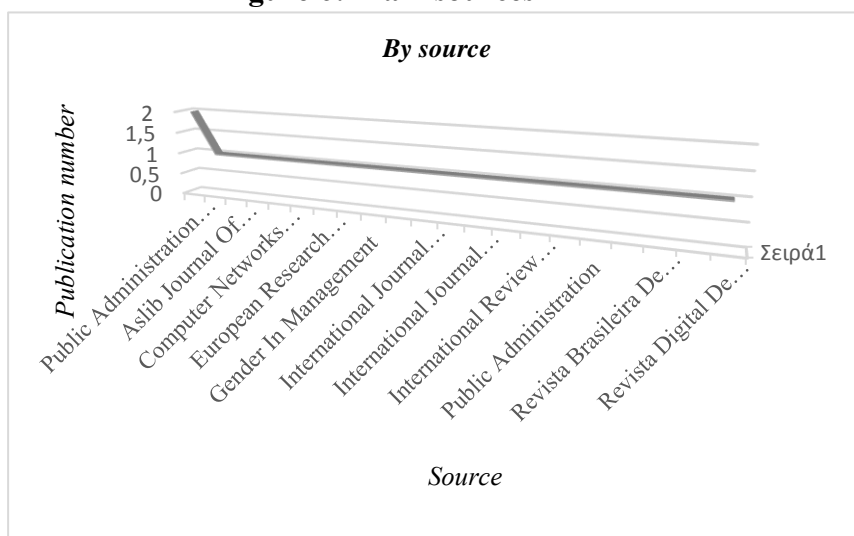
chapter and 1 document related to a conference, while book production is elusive.

The results obtained, which allow us to point out that studies have only been produced in the form of articles, are due to the limited approach to the object of study.

Figure 6 shows the scientific production by source, Public Administration Review being the one that has contributed with 2

productions, followed by the other entities with 1, followed by Aslib Journal Of computes Networks, European Research, Gender In Managemet among others with 1 publication, showing that the sources are dispersed, mostrando que las fuentes están dispersas

Figure 6: Main sources

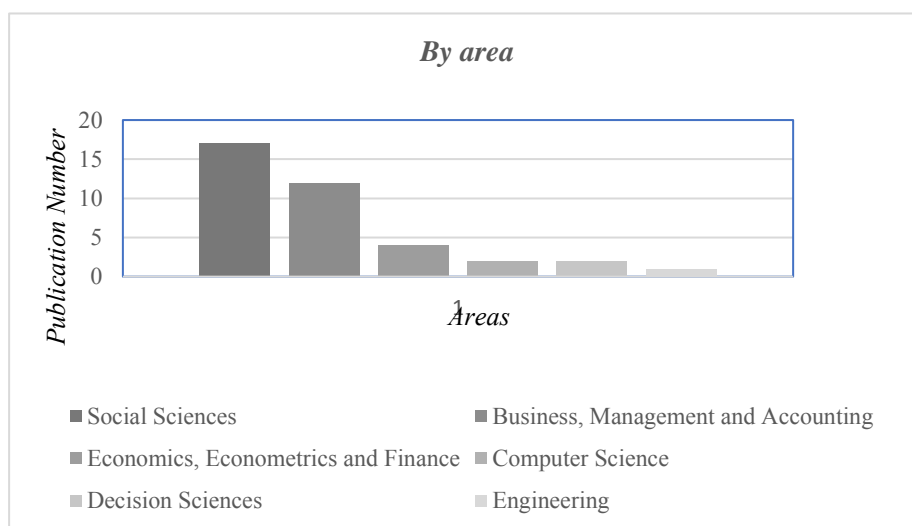


Source: Scopus database

Regarding the area in which the publications have been developed, from Figure 7, it is observed that the area of social sciences

stands out, followed by economic sciences and the lowest number of interest in the subject is engineering.

Figure 7: Main areas

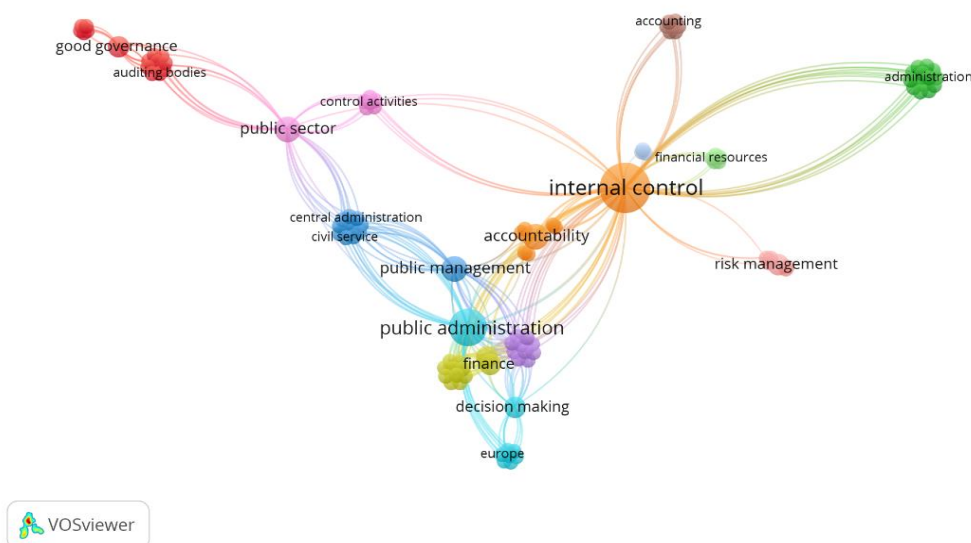


Source: Scopus database

The literature obtained is grouped in 4 sections, in which it is reflected that public administration leads the grouping, being in

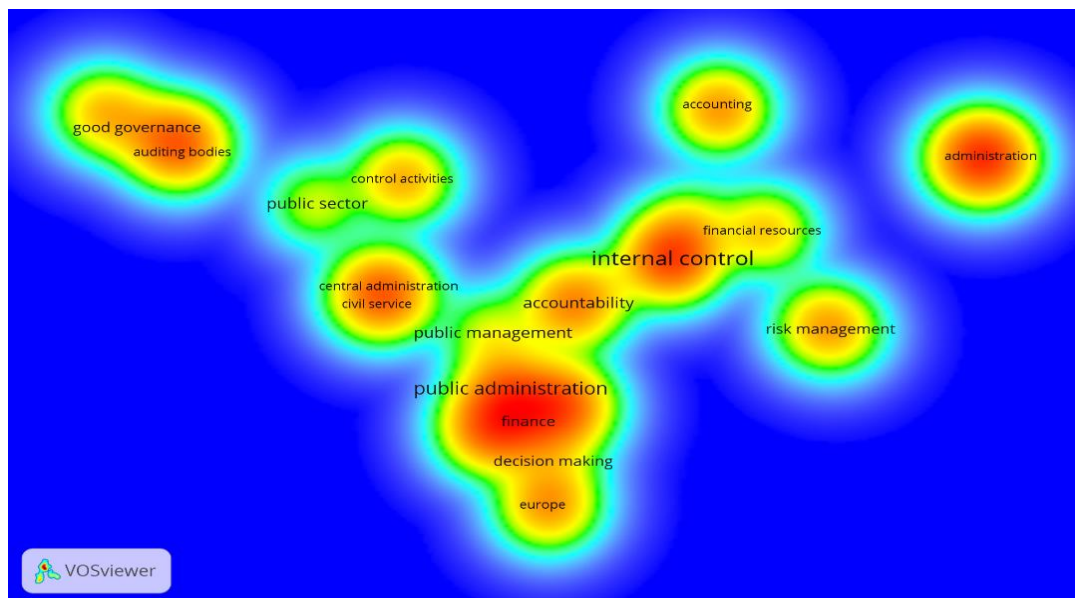
lesser degree the internal control, which indicates that the latter is significantly addressed to a lesser degree.

Figure 8: Map of the Internal Control and Public Management Study



Source: Scopus database processed with VOSViewer open source software.

Figure 9: Conceptual Map of the study of Internal Control and Public Management



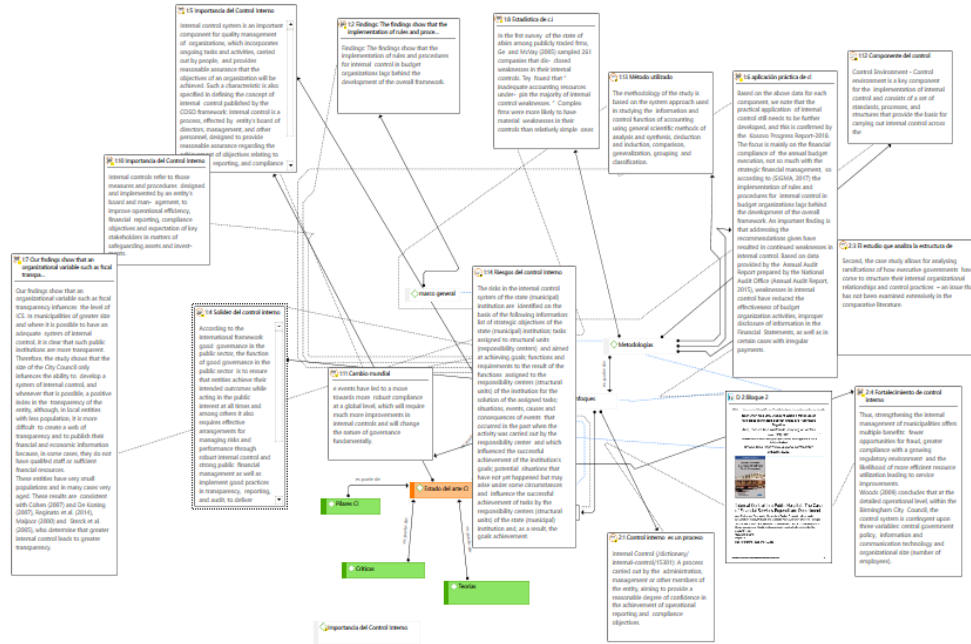
Source: Scopus database processed with VOSViewer open source software.

The map is based on the study of Internal Control and Public Management, a tool that is necessary and used to understand and deepen concepts, as well as to organize the information obtained that allows us to develop the topic addressed.

On the other hand, although internal control and public management have not evolved

significantly, there are, nevertheless, selected aspects in the analysis that allow us to increase our knowledge, for which it is essential to analyze the corresponding literature.

For the analysis of the literature, we have used the Atlas ti application, as follows:



Source: Atlas ti

As it pertains to the implementation of internal control in entities [9] asserts that for good governance in public administration is to ensure that public entities can achieve results in their intended objectives for public benefit for this there is need for provisions that make management effective and a benefit with sound internal control.

Good governance includes ethical values, clearly articulated goals and strategies, appropriate tone at the top, and internal control.

In this regard, Antón [16] points out: “*The institutions are committed to a profound change in new forms of integrity and institutional governance, which require organisational change*”. The change must allow for the implementation of internal control aligned with the COSO III methodology, which must be endorsed by those responsible for the governance of the organization and must be related to internal control.

Although the implementation of the internal control system applied to public administration is mandatory, due to the legal instruments that regulate the activity, there is a movement, albeit modest, in which the

management attributes that can be used for this system are added to compliance with standards, improvement of public administration [17].

While Kopríc et al., [18] refers to previous data in which each component has been observed and that in the practical application of internal control still needs to be further developed coupled with the implementation of internal control standards and procedures in budgetary organizations lags behind the development of the overall framework

Ujkani & Vokshi [9] states that internal control is important because it is a component that unifies activities and tasks of people ensuring that the organizations objectives are achieved.

On the importance of Internal Control, Kopríc et al. [18] also refers that the control environment: control environment is a key component for the implementation of internal [18] control and consists of a set of standards, processes and structures that provide the basis for carrying out internal control throughout the organization.

From the point of view of Candreva [19], the first state of the art study among publicly traded companies, where 261 companies revealed weaknesses in their internal controls. They found that "inadequate accounting resources account for the majority of internal control weaknesses." "Complex firms were more likely to have significant gaps in their controls than relatively simple firms".

From the approach argued by Lartey et al. [20] internal control is relevant in all entities, regardless of their objectives. However, its effectiveness varies widely across jurisdictions. The relationships were measured using a structural equation modeling approach - SEM, and the conclusion was based on a set of hypotheses developed to test the reliability and appropriateness of the model. The results suggest that preventive, detective, corrective and directive controls are good determinants of compliance.

Similarly, INTOSASI [21] defines a recommended framework for internal control in the public sector and provides a basis for the assessment of internal control. The development can be applied to all operational aspects of an organisation. In any case, it does not attempt to restrict or disrupt the work of the authorities in relation to the development of legislation, who makes the rules or who has the authority to set policy in an organisation.

Kachkova et al. [22], as related to the methodology bases its systemic approach used in the study of information and control function of accounting using general scientific methods of analysis and synthesis, deduction and induction, comparison, generalization, grouping and classification.

4. Conclusions

The approach to the relationship between internal control and public management, although it does not have a significant bibliographic production, however, through the 16 publications selected from the 24 found, a review of the most important literature has been carried out, establishing

that internal control in public entities should be considered an important tool for the development of public management that achieves its objectives and results-based management.

Likewise, through the methodology and the analysis of bibliometrics, 24 researches have been identified through the bibliographic manager Scopus, of which 16 have been chosen because they are related to the topic, showing that since 1977 there are publications which are meager and have achieved an insignificant increase of 6 publications to the year 2020. It also shows the publications by institution which highlights 4, in terms of authors highlight 2 with 2 publications, in the place of origin leading the ranking 5 productions with undefined countries, and excels in ranking of publications by articles in number of 20, by sources Public Administration Review is the one that has contributed with 2 productions, by areas is the social sciences which leads the group.

Likewise, public entities are immersed in a process of change in application of the public policy of modernization of the state which aims to make state entities more transparent and orderly and to be at the service of citizens without increasing public spending. Therefore, it follows that the importance of the internal control system and its application in public entities is necessary because it is a tool that allows a transparent and efficient management that benefits the citizen.

The implementation of internal control would provide quality public management for the benefit of the population, which would allow the evaluation of risks in public administration budgets using continuous, concurrent and preventive controls.

Acknowledgements

This paper is financed by Portuguese national funds through FCT—Fundação para a Ciência e a Tecnologia, I.P., project number UIDB/00685/2020. Moreover, the project is funded under the program of the Minister of Science and Higher Education titled “Regional Initiative of Excellence” in 2019-2022, project number 018/RID/2018/19, the amount of funding PLN 10 788 423,16”.

References

- [1] Miaja Fol, M. (2019). Present and future of Internal Control in Public Administrations. 74, 85–98.
- [2] Congress of the Republic Law No 28716. (2006). Law No. 28716 Law of Internal Control of State Entities. In El Peruano (Issue Page 316871, p. 3).
- [3] Comptroller's Resolution No 320-2006-CG. (2006). Internal Control Standards Comptroller's Office Resolution No 320-2006-CG. El Peruano, 42.
- [4] Comptroller General of the Republic. (2019). RC_146-2019-CG.pdf (p. 40).
- [5] Baptista Ribeiro N.A., et al. (2020). The impact of internal auditing on public management: the case of Portuguese local authorities. International Business Information Management Association, IBIMA
- [6] Mendoza Briones, A. (2017). Importance of administrative management for innovation in medium-sized commercial enterprises in the city of Manta. *Dominio de Las Ciencias*, 3(2), 947-964.
- [7] Voes S.B., I. V. . (2020). Internal control system in the public sector: An analysis of the model adopted by the municipality of Londrina, Paraná State.
- [8] Jabatan Perdagangan, P. M. M. M. (2019). Good governance and integrity: the perspective of the academic institution.
- [9] Ujkani, S., & Vokshi, N. B. (2019). An overview on the development of internal control in public sector entities: Evidence from Kosovo. *International Journal of Economics and Business Administration*, 7(4), 320-335.
- [10] Neyra Torres, J. L. (2018). Analysis of internal control in the logistics area in the company Masedi, Lima 2016. César Vallejo University.
- [11] Gamboa Poveda, J., Puente Tituaña, S., & Vera Franco, P. (2016). Importance of internal control in the public sector. *Revista Publicando*, 3(8), 487-502.
- [12] Lozano Valqui, G., & Tenorio Aguinaga, J. (2015). The internal control system: A tool for the improvement of business management in the construction sector. *Accounting Power for Business*, 1, 49-59.
- [13] Morgado Perez, A. (2000). Bibliometric indicators and their importance in clinical research: Why know them? *Mapfre Medicine*, 11(1),
- [14] Palomares & Chisvet. (2019). TRAINING AND ORIENTATION FOR ENTREPRENEURSHIP. WHAT THE BIBLIOMETRICS AND NOVEL ENTREPRENEURS SAY. *Spanish Journal of Counseling and Psychopedagogy*, 30(1), 131-149.
- [15] Ardanuy, J. (2012). Brief introduction to bibliometrics. *Universitat de Barcelona*, 63. <https://doi.org/10.1038/nmat3485>
- [16] Antón, M. P. S. (2020). Internal control of public administrations. Its role in prevention and the fight against the corruption of the public powers. *Revista Catalana de Dret Public*, 2020(60), 87–101. <https://doi.org/10.2436/rcdp.i60.2020.3412>
- [17] Oprean, C., Țițu, A. M., Marinescu, N., & Vlad, A. (2012). Making activities in local public administration more procedural. *Quality - Access to Success*, 13(SUPPL.5), 211–218.

- [18] Koprić, I., Kovad', P., & Musa, A. (2012). Agencies in Three Southeastern European Countries: Politics, Expertise and Law. *NISPAcee Journal of Public Administration and Policy*, 5(2), 17-44. <https://doi.org/10.2478/v10110-012-0005-0>.
<https://doi.org/10.2478/v10110-012-0005-0>
- [19] Candreva, P. J. (2006). Controlling internal controls. *Public Administration Review*, 66(3), 463-465. <https://doi.org/10.1111/j.1540-6210.2006.00602.x>
- [20] Lartey, P. Y., Kong, Y., Bah, F. B. M., Santosh, R. J., & Gumah, I. A. (2020). Determinants of Internal Control Compliance in Public Organizations; Using Preventive, Detective, Corrective and Directive Controls. *International Journal of Public Administration*, 43(8), 711-723. <https://doi.org/10.1080/01900692.2019.1645689>
- [21] INTOSASI. (2004). Guide to Public Sector Internal Control Standards.
- [22] Kachkova, O. E., Vakhrushina, M. A., Demina, I. D., Krishtaleva, T. I., Sidorova, M. I., Dombrovskaya, E. N., & Klepikova, L. V. (2018). Developing the accounting concept in the public sector. *European Research Studies Journal*, 21(1), 636-649.

Creative Commons Attribution License 4.0 (Attribution 4.0 International, CC BY 4.0)

This article is published under the terms of the Creative Commons Attribution License 4.0

https://creativecommons.org/licenses/by/4.0/deed.en_US