



Received: 26-10-2023
Accepted: 06-12-2023

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

A Systematic Literature Review of Responsibility Accounting Research

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Abstract

The purpose of responsibility accounting was to provide information for administrators to evaluate the effectiveness of exploiting enterprise resources. The information provided by responsibility accounting helps administrators evaluate the performance of organizations, departments, and individuals with their responsibility for the overall success of the business. Therefore, responsibility accounting plays an important role in management accounting information to help administrators perform their functions. This article

aims to evaluate research trends in applying responsibility accounting in businesses based on documents in the Google Scholar database in the years 2015 - 2023. The results show a growing interest in using responsibility accounting as a management tool in businesses, with 2019 and 2020 being the years with the highest number of publications and many journals published. Up to 32 publications on this issue. Finally, the keyword analysis identified a variety of content that will be important research points for future research.

Keywords: Responsibility Accounting, Systematic Document Review, VOS Viewer

1. Introduction

Responsibility accounting is a part of the management accounting system, which is increasingly playing a particularly important role in the management and operations of businesses and organizations, especially businesses with large scale. The information provided by responsibility accounting helps administrators evaluate the performance of organizations, departments, and individuals with their responsibility for the overall success of the business. The purpose of responsibility accounting was to provide information for administrators to evaluate the effectiveness of exploiting enterprise resources. Through this, it contributes to improving the operational efficiency of these units. Therefore, in recent years, general studies often choose responsibility accounting in businesses for synthesis and analysis. Providing a comprehensive picture of research on corporate responsibility accounting from 2015 to present is necessary to fill previous research gaps.

The article clarifies the following research questions, including Q1: What is the number of articles on responsibility accounting in enterprises published from 2015 to 2023? Q2: And which journals have the most publications related to this content? Q3: What topics are the keywords used grouped into? Q4: And have these keywords changed and emphasized over time?

To answer the above questions, the study reviewed 225 articles published in the period 2015-2023. Research conducted through bibliometric analysis makes a great contribution to the research community because through bibliometrics, a valuable amount of information can be collected about a topic. By reflecting on what has been done and what needs future research, the article aims to add to the literature on different methods and contexts to assist researchers in corporate responsibility accounting. The research is divided into parts: defining the conceptual foundation, applied methods, research results and concluding remarks.

2. Theoretical basis

A responsibility center is a unit within an organization led by an administrator responsible for its operations. It can be said that a company is a collection of responsibility centers. Responsibility centers form a hierarchy. The lowest levels are departments, shifts, and other small units. Business units consist of a number of smaller units that are higher in the hierarchy. The entire company is a responsibility center, although the term is often used to refer to units within the company. A responsibility center exists to accomplish one or more purposes, called its goals. The company has a number of general goals, and senior management decides on a set of strategies to accomplish these goals. The goal of the various responsibility centers is to help realize these strategies. Since every organization is a collection of responsibility centers, if each responsibility center meets its goals, the organization will achieve its goals.

Gordon (1963)^[2] believes that the responsibility accounting system includes the following four elements: (1) Responsibility centers; (2) Principles for determining prices of goods and services; (3) Regulations on responsibilities and authorities for each administrator and management responsibility accountant; (4) Reward system. Fowzia (2011)^[3] suggests adding the following two elements: (1) Developing metrics or standards for evaluation based on establishing a system of indicators to evaluate responsibility centers; (2) Evaluate the performance of responsibility centers to implement appropriate remuneration regimes. Vos and O'Connell (1968) asserted that responsibility accounting reports are the basic foundation of management information systems, providing information for planning and controlling activities. The basic content of a responsibility accounting report includes: (1) Responsibility centers; (2) Evaluation standards; (3) Actual performance results; (4) Variation of objects in the implementation period compared to the budget period (Cox *et al.*, 1989)^[1].

When referring to responsibility centers, authors Melumad, Mookherjee, Dand Reichelstein (1992)^[5] said that in businesses there exist three types of responsibility centers: cost centers, profit centers and investment centers. However, according to the results of an actual investigation by Sarkar and Yeshmin (2005), up to 33% of businesses have four types of responsibility centers (cost centers, revenue centers, profit centers and profit centers), investment center) and 30% of businesses have three types of responsibility centers (cost center, profit center and investment center). Schoute's (2008)^[7] research has drawn advice for managers that they should operate businesses with four types of responsibility centers, which are cost centers, revenue centers, profit centers and investment center. In which: cost center is mainly responsible for costs; (2) Revenue center is responsible for revenue maximization; (3) Profit center is mainly responsible for profit growth; (4) The investment center is primarily responsible for mobilizing and using investment capital. Cost centers are responsibility centers whose inputs are measured in monetary measures, but are not (measured) responsible for outputs. Output is typically measured in physical units or by operational goals. There are two types of cost centers: design cost centers and discretionary cost centers. Revenue centers are characterized by inputs and outputs that are measured in monetary units. Normally revenue centers are marketing/sales departments that do not have the authority to set selling prices and are not responsible for the cost of goods sold to the market. The profit center is an independent part of the enterprise, the profit center director has the right to buy inputs at the most reasonable price and sell products at the price that maximizes revenue. If managers do not have complete authority over buying and selling, it is difficult to evaluate the efficiency of the profit center. The profit center has no decision-making authority over investment activities. Profit centers are set up to decide on product structure, product quantity, selling price, and product quality. The investment center is the profit center. The investment center's input and output are both measured in money, but the investment center mainly carries out investment activities in other members. The investment center director is not only responsible for generating revenue, planning and controlling costs in the center but also for purchasing, using and liquidating assets according to profitable investment principles.

The formation of responsibility centers in businesses is inevitable and necessary. To form responsibility centers, businesses first need to rely on technological processes, production characteristics, product consumption, enterprise scale, professional capacity of staff, etc. to determine the production organizational structure (production department) and functional departments to help administrators make appropriate business decisions (non-production department). For the production department, businesses need to determine the number of production levels, management horizon, etc. to determine responsibility centers; For non-production departments, most businesses rely on horizontal management hierarchy to determine appropriate responsibility centers.

3. Method

This study uses the systematic literature review method SLR (Systematic Literature Review) of Tranfield *et al.* (2003). Sample selection for the study was based on PRISMA (priority items for systematic reviews and meta-analyses) originally proposed by Liberati *et al.* (2009)^[4] and updated in 2021 by Page *et al.* (2021)^[6]. The PRISMA flow diagram is based on three steps: identification, screening, and study inclusion.

Step 1: The author synthesizes previously published overview documents related to responsibility accounting in businesses and introductory documents on the nature and role of responsibility accounting in businesses from sources data on Google Scholar. This collection aims to explain the urgency of the research, overview the research, and point out research gaps. Data was collected on October 10, 2023, with the use of the following keywords "responsibility accounting". A total of 225 results were found from the Google Scholar site from 2015 to 2023.

Step 2: The author group has screened to remove inappropriate documents through technical screening and content screening. For technical screening, documents are in the form of: Encyclopedia, Editorials, Short communications, Mini reviews, book chapters will be eliminated. For content screening, documents are pre-read to eliminate documents with irrelevant content even though they contain search keywords. The results after filtering showed that 225 results met the filtering conditions for inclusion in the study.

Step 3: The number of remaining documents after the two steps is analyzed by the SLR (systematic literature review) document system and put into VosViewer software to analyze keywords and co-citation analysis. The results of SLR analysis are presented in tables and graphs. The results of bibliometric analysis will be presented in visual form. From the analysis results, the study finds popular research directions, names the research directions, and suggests future research directions.

4. Results

4.1 Statistics on year of publication

From 2015 to 2023, a total of 225 articles on corporate responsibility accounting were indexed in Google Scholar with an average of 25 articles published each year. The number of articles published is relatively uniform across years, ranging from 19 articles to 32 articles. 2019 and 2020

are the two years with the highest number of publications, 32 publications respectively. The statistical results of the year of publication show that researchers pay a lot of attention to responsibility accounting equally between years. Regarding citation statistics, articles published within 9 years were cited 889 times. The article with the most citations is "Factors affecting responsibility accounting at

joint stock commercial banks in Vietnam" by the author group NT Dien, VH Le Doan Minh Duc, N Thuy, published in 2020 by jsju.org publisher with 62 citations. Next is the article "Pancasila-based social responsibility accounting" by the author group JHE Sitorus, published in 2016 by Elsevier publishing house with 60 citations.

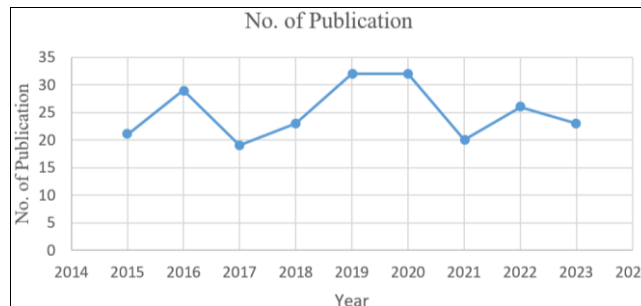


Fig 1: Chart of the number of studies over the years

Table 1: Summary of publications with high citations

Title	Cites	Authors	Year	Publisher
Factors affecting responsibility accounting at joint stock commercial banks in Vietnam	62	NT Dien, VH Le Doan Minh Duc, N Thuy...	2020	jsju.org
Pancasila-based social responsibility accounting	60	JHE Sitorus	2016	Elsevier
Rethinking performativity: a critical realist analysis of accounting for corporate social responsibility	45	M Baker, S Modell	2019	emerald.com
The development of corporate social responsibility in accounting research: evidence from Indonesia	40	J Gunawan	2018	emerald.com
Sustainability accounting: upgrading corporate social responsibility	35	M Peršić, S Janković, D Krivačić	2017	Springer
The effect of OECD principles of corporate governance on social responsibility accounting	27	Y Shahwana	2020	researchgate.net
Corporate Social Responsibility and accounting in Poland: a literature review	24	H Waniak-Michalak, M Macuda...	2016	cig.ase.ro
Social responsibility accounting, disclosure and real practice: Evidence from Jordan	24	Y Shahwan, M Hamza, F Al-Fasfus...	2022	ideas.repec.org
Corporate social responsibility-a new trend in hospital Accounting?	23	M Macuda	2016	cejsh.icm.edu.pl
Impact of environmental and corporate social responsibility accounting on organizational financial performance: Evidence from selected listed firms in Nigeria stock ...	23	OC Onyinyechi, JU Ihendinihu	2016	journals.co.za
The impact of supply chain management on financial performance and responsibility accounting: Agribusiness case from Egypt	23	MA Wahdan, MA Emam	2017	researchgate.net
Corporate social responsibility accounting for arising issues	22	F Weber, U Larsson-Olaison	2017	emerald.com
Responsibility accounting: A review of related literature	19	T Biswas	2017	researchgate.net
Factors affecting responsibility accounting at public universities: Evidence from Vietnam	18	NT NGUYEN	2020	pdfs.semanticscholar.org
The impact of corporate social responsibility disclosure and accounting comparability on earnings persistence	17	NV Khuong, AAA Rahman, A Meero, LHT Anh...	2022	mdpi.com
Corporate social responsibility and its relevance to accounting	16	S Homayoun, Z Rezaee...	2015	pdfs.semanticscholar.org



Fig 2: Chart of number of citations over the years

4.2 Keyword analysis results

In the keyword analysis section, research and select keywords that appear 10 times or more. Keywords are evaluated by the software based on the number of occurrences and total link strength. Keyword analysis results can be exported into files as images. The keyword analysis results are as follows:

Selected	Term	Occurrences	Relevance
<input checked="" type="checkbox"/>	csr	17	2.22
<input checked="" type="checkbox"/>	use	13	1.72
<input checked="" type="checkbox"/>	responsibility accounting system	22	1.54
<input checked="" type="checkbox"/>	corporate social responsibility accounting	33	1.53
<input checked="" type="checkbox"/>	role	40	1.45
<input checked="" type="checkbox"/>	nigeria	11	1.39
<input checked="" type="checkbox"/>	corporate social responsibility	54	1.33
<input checked="" type="checkbox"/>	responsibility accounting	336	1.06
<input checked="" type="checkbox"/>	factor	15	0.93
<input checked="" type="checkbox"/>	application	42	0.84
<input checked="" type="checkbox"/>	paper	12	0.77
<input checked="" type="checkbox"/>	concept	17	0.73
<input checked="" type="checkbox"/>	disclosure	47	0.62
<input checked="" type="checkbox"/>	system	29	0.60
<input checked="" type="checkbox"/>	effect	21	0.58
<input checked="" type="checkbox"/>	china	15	0.54
<input checked="" type="checkbox"/>	implementation	26	0.52
<input checked="" type="checkbox"/>	accounting	67	0.38
<input checked="" type="checkbox"/>	social responsibility	71	0.26

Fig 3: Keywords repeated many times

Out of 1117 keywords, only 31 keywords meet the criteria to appear at least 10 times. The keyword “responsibility accounting” has appeared the most with 336 times. The keywords “social responsive” appeared 71 times.

Related keywords are grouped into groups, each group is a separate color. Note that the larger the circle, the more times it appears; the thicker the line connecting the two keywords, the greater the frequency of occurrences. Related keywords are grouped into groups, each group is a separate color. Looking at the image, it can be seen that the keywords are divided into 5 groups with 19 items, 113 links and total link strength of 1053. Group 1 is represented by red links with the keywords corporate social responsibility, effect, Nigeria, paper. Group 2 is represented by green links with the keywords accounting, china, concept, disclosure, and social response. Group 3 is represented by green links with keywords application, factor, responsibility accounting, role. Group 4 is represented by yellow links with the keywords responsibility accounting, system, and use. Group 5 is represented by purple links with the keyword implementation. With 5 research directions and 19 popular keywords, the results show that research content on responsibility accounting in businesses is of interest. Future studies can base on that to choose research directions to fill the gap, or analyze more deeply.

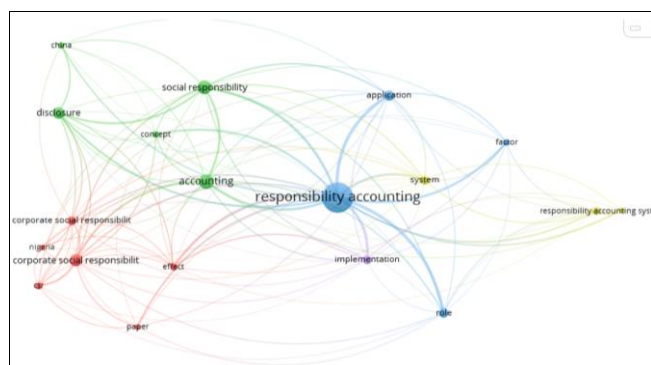


Fig 4: Co-occurrence networks

In addition, the results from the VOSviewer tool have shown the time of keywords appearing. Dark colors represent keywords researched from the first years (2015), in recent studies, keywords have appeared in brighter colors. The keyword appearance time chart shows that responsibility accounting is the keyword with the most interest, and assessing the level of interest over time, this keyword received a lot of attention in the period 2018-2020.

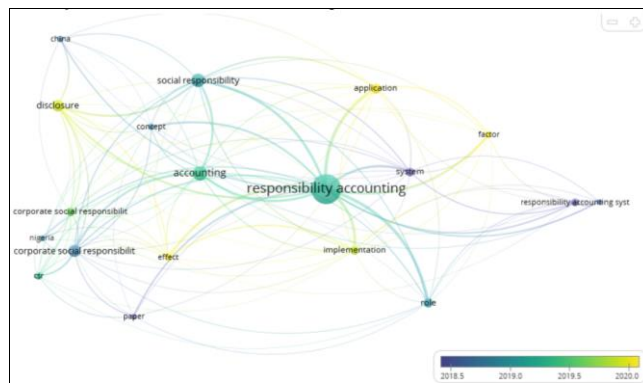


Fig 5: Time of keyword appearance

4.3 Co-authorship analysis

To explore the tendency to cooperate in researching the relationship between responsibility accounting in businesses, this study conducted an analysis of co-authorship relationships between individual authors. According to Benoit *et al.* (2018), the analysis results help improve understanding of research collaboration and help discover influential researchers. Out of a total of 225 publications reviewed, 390 authors participated in writing the articles. Among them, 6 authors have participated in writing 3 or more articles. Figure 6 presents the co-authorship network map. The link between two nodes represents the collaborative relationship between the two authors, and the thickness of the link represents the intensity of the collaboration.

Selected	Author	Documents	Total link strength
<input checked="" type="checkbox"/>	dimitropoulos, p	3	3
<input checked="" type="checkbox"/>	koronios, k	3	3
<input checked="" type="checkbox"/>	rhee, kg	3	3
<input checked="" type="checkbox"/>	sun, f	3	3
<input checked="" type="checkbox"/>	ogaluzor, oi	3	0
<input checked="" type="checkbox"/>	owino, p	3	0

Fig 6: Author has many articles

Related authors are grouped into groups, each group is a separate color. Note that the larger the circle, the greater the relationship between the authors; the thicker the line connecting two keywords, the greater the intensity of appearance. Looking at the image, it can be seen that the authors are divided into 1 group with 3 items, which is Anh. N, Tuan.T, Hung.D.

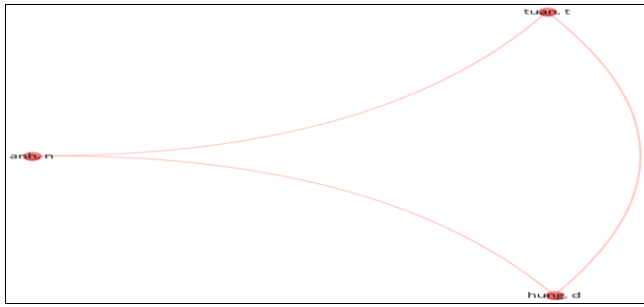


Fig 7: Co-authorship analysis by units of authors

5. Conclusion

In this study, we evaluated global publications on corporate responsibility accounting indexed in the Google Scholar database published between 2015 and 2023 to provide insights into the number publishing, journal publishing, keyword networks and co-author networks. This study used the bibliometric method with the help of a number of statistical and data visualization applications to explore research trends in the content of the relationship between responsibility accounting in business.

Research results show that there have been a total of 225 articles on corporate responsibility accounting indexed in Google Scholar from 2015 to 2023. Statistical results show that this is a topic of interest in recent years. Here, this is reflected in the high number of publications appearing in the period 2018-2020. In particular, there are many referenced articles and a large number of citations. In terms of keywords, "responsibility accounting" has appeared the most with 336 times.

The research results have contributed to the general theoretical basis, serving as a basis for reference studies on the relationship between responsibility accounting in businesses. Data collected from richer sources such as Scopus or Web of Science are suggestions for further research on the relationship between responsibility accounting in businesses.

6. References

1. Cox CT, Nix HM, Wichmann Jr H. Responsibility Accounting and Operational Control for Gover. *Accounting Horizons*. 1989; 3(2):38.
2. Gordon MJ. Toward a theory of responsibility accounting systems. *NAA Bulletin*. 1963; 45(4):3-9.
3. Fowzia R. Use of responsibility accounting and measure the satisfaction levels of service organizations in Bangladesh. *International Review of Business Research Papers*. 2011; 7(5):53-67.
4. Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JP. *et al*. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Annals of internal medicine*. 2009; 151(4), W-65.
5. Melumad N, Mookherjee D, Reichelstein S. A theory of responsibility centers. *Journal of Accounting and Economics*. 1992; 15(4):445-484.
6. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, *et al*. Updating guidance for reporting systematic reviews: Development of the PRISMA 2020 statement. *Journal of Clinical Epidemiology*. 2021; 134:103-112.

7. Schoute M. Determinants of Responsibility Centre Choices: An Empirical Study at the Managerial Level. *Journal of Applied Management Accounting Research*. 2008; 6(1):47.