Contents lists available at GrowingScience

Uncertain Supply Chain Management

homepage: www.GrowingScience.com/uscm

Management accounting research trends: Bibliometrics and content analysis

Komang Ayu Krisnadewi^{a*}, I Ketut Suryanawa^a, Eka Ardhani Sisdyani^a, Ni Made Adi Erawati^a and I Gusti Ayu Made Asri Dwija Putri^a

^aUniversitas Udayana, Bali, Indonesia

ABSTRACT

Article history:	This study aims to examine an overview of management accounting research in the last decade. In
Received March 12, 2023	addition, it also describes the latest research trends, namely in the last five years, both in terms of
Received in revised format June	the topics discussed, the use of theory, and the methods used. The researchers employ the
18, 2023	bibliometric analysis method and use VOSviewer to describe management accounting research for
Accepted July 17 2023	the period 2013-2022. We retrieve data on articles from two leading journals in this field, namely
Available online	Management Accounting Research (MAR) and Journal of Management Accounting Research
July 17 2023 Keywords:	(JMAR), using the Scopus database. The findings of this study indicate that there were six research
Reywords: Bibliometrics	clusters over the past decade, namely (1) governance and performance management, (2)
Management accounting	management control, (3) performance evaluation, (4) risk-based performance management and
Research	CSR, (5) budgeting and ethics, and lastly (6) the risk and interfirm relationships. Research trends
Journal	in the last five years show that the theories explicitly used in research in this field include agency,
Content	
content	economic, social identity, social comparison, and contingency theory. The research methods used
	during the last five years have been dominated by archives, experiments, and surveys. Papers
	published by JMAR are dominated by those using archival methods, while the papers in MAR are
	dominated by those using experiments and field research. This research provides an overview, for
	students and scholars interested in management accounting research, of the subjects, ideas, and
	research methodologies that have been employed in the recent past and today.

© 2023 Growing Science Ltd. All rights reserved.

1. Introduction

Previous researchers have mapped out research in the field of management accounting. Guffey and Harp (2017) conducted a descriptive content analysis and citation analysis specifically for the Journal of Management Accounting Research (JMAR) between 1989 and 2013. Bromwich and Scapens (2016) reviewed management accounting research in the journal Management Accounting Research starting from its establishment, namely 1990 to 2015. Herschung et al. (2018) provided a summary graphic representation of management accounting research using quantitative methods during the period 2002-2012. They analyzed six journals, namely Accounting, Organizations and Society (AOS), Contemporary Accounting Research (CAR), Journal of Accounting & Economics (JAE), Journal of Accounting Research (JAR), and The Accounting Review (TAR), along with JMAR. In contrast to our study, previous researchers used different periods while we have used the most recent period. This study aims to look at the mapping of management accounting research in the last 10 years and, through content analysis and identify trends in the research over the last five years. It is hoped that the results of this study can provide ideas for scholarships and researchers who are looking for research opportunities in the field of management accounting while looking at the latest management accounting practices.

The uniqueness of this study lies in our efforts to map research trends in management accounting by focusing on top-tier journals that discuss management accounting specifically, namely JMAR and MAR. The use of these journals is based on the authors' belief that the review process in these journals is very selective with a very high citation rate making them worthy of being used as a basis for assessing trends in management accounting research. In addition to looking at an overview of *Corresponding author

E-mail address komangayukrisnadewi@unud.ac.id (K. A. Krisnadewi)

© 2023 Growing Science Ltd. All rights reserved.

doi: 10.5267/j.uscm.2023.7.014

management accounting research over the last 10 years, this paper also provides an overview of research opportunities that can be researched by academics. The authors specifically explore the research trends in management accounting over the last five years. This includes the topics discussed, the application of theories, and the research methods that are often used by researchers in this field.

We use bibliometric analysis to obtain an overview of management accounting research in the last 10 years. The article data used was obtained from two leading management accounting journals based on the Scopus database. The publication period used is 2013-2022. We obtained 423 articles published in Management Accounting Research (MAR) and the Journal of Management Accounting Research (JMAR) during this period. Furthermore, we also explored 228 research papers published during the last five years to ascertain patterns in the research.

The results of our bibliometric analysis show that, in the last decade, there have been six research clusters. These are (1) governance and performance management, (2) management control, (3) performance evaluation, (4) risk-based performance management and CSR, (5) budgeting and ethics, and (6) risk and interfirm relationships. The research trends during the last five years indicate that studies in this field include the application of the following theories: agency theory, economic theory, social identity theory, social comparison theory, contingency theory, contract theory, goal-setting theory, practice theory, self-determination theory, and social exchange theory. The research methods used during the last five consecutive years have been dominated by archives, experiments, surveys, and field research. If one compares the two management accounting journals, the papers in JMAR are dominated by those that use archival methods, while papers in MAR are dominated by those that use archival methods, but it is hoped that this will help provide an overview for students and researchers who have an interest in management accounting research on the topics, theories, and research methods that have been used currently and in recent years.

This paper is organized into four sections. The next section will briefly describe the methodology we used in searching for articles for this research. Section 3 discusses the research findings which consist of the results of bibliometric analysis for the 2013-2022 period and an exploration of management accounting research for the 2018-2022 period. Section 4 discusses our conclusions, the limitations of this study, and suggestions for further research.

2. Material and methods

This study uses bibliometric analysis to map the research conducted by researchers in management accounting. We use the VOSviewer application which is commonly used by other researchers in conducting this analysis, for example Trinarningsih et al. (2021). We use the Scopus database to search for data as have previous researchers (Ciger, 2020; Trinarningsih et al., 2021). As the first step, we use the keyword "management accounting" as the source title in the Scopus database. Searches are limited by using "journal" as the source type, "article" as the document type, and English as the language. The search results for the first stage found two journals namely Management Accounting Research (Elsevier) and Journal of Management Accounting Research (AAA). Both of these journals have a research scope that focuses on the field of management accounting.

In the second stage, we searched for all documents in the two journals in the last 10 years, namely 2013-2022¹, and obtained 423 articles. Overall, the keywords we used in the data search for this study were source title SRCTITLE ("management accounting") AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2010) OR LIMIT-TO (PUBYEAR, 2011) OR LIMIT-TO (PUBYEAR, 2013)). To explore management accounting research trends in the last five years, we conducted a similar search process, but limited the years of publication from 2018 to 2022 and thus obtained 234 articles. Of these 234 articles, we dropped six because they were editorials rather than research papers. Therefore, our exploration process is based only on 228 articles. We use excel and NVIVO software to analyze the content of the articles.

3. Results and Discussion

3.1 Bibliometric Analysis 2013-2022

The document data collection process using the Scopus database yielded 238 articles from JMAR and 185 articles from MAR. As for the distribution of articles in both journals, it appears that JMAR publishes more articles than MAR. However, in terms of the number of citations, MAR obtained more than JMAR, thus placing MAR as a journal with a higher percentile (87% - Q1), with an SJR value of 1,068 and SNIP of 1,777 compared to JMAR (62% - Q2) with an SJR of 0.768. and SNIP of 0.97 based on Scopus metric data for the 2021 period.

The Scopus database shows that there are ten authors who have contributed the most articles to the 423 obtained, with the two most prolific authors being Dekker, H.C (11 articles) and Chen, C.X. (9 articles). As for the affiliation of the authors, the country of origin of the most affiliates is the US (with 205 articles), followed by Australia (54), the Netherlands (47), Germany (44), and the UK (42). We summarize the ten highest authors and highest affiliates in Table 1. According to the Scopus database, there are the 10 most mentioned keywords. These keywords are incentives (21), management accounting,

```
1550
```

¹ include article in press

management control, management control systems (18 each), performance measurement (17), executive compensation and performance (12 each), then cost stickiness and levers of control (10), and balanced scorecards (9).

Table 1	
Top Ten Authors	and Affiliation

Documents by Author		Documer	Documents by Affiliation		
Rank	Author	Documents	Rank	Affiliation	Documents
1.	Dekker, H.C.	11	1.	United States	205
2.	Chen, C.X.	9	2.	Australia	54
3.	Balakrishnan, R.	6	3.	Netherlands	47
4.	Libby, T.	6	4.	Germany	44
5.	Sperkle, R.F.	6	5.	United Kingdom	42
6.	Widener, S.K.	6	6.	Canada	34
7.	Bedford, D.S.	5	7.	France	19
8.	Christ, M.H.	5	8.	Sweden	14
9.	Sedatole, K.L.	5	9.	Austria	13
10.	Thornock, T.A.	5	10.	China	13

(source: scopus.com)

Table 2

High Impact Publication	High	Impact	Publication	
-------------------------	------	--------	-------------	--

No.	Author(s)	Title	Source title	Citations
1	(Otley, 2016)	The contingency theory of management accounting and control: 1980-2014	MAR	262
2	(Melnyk et al., 2014)	Is performance measurement and management fit for the future?	MAR	239
3	(Arjaliès & Mundy, 2013)	The use of management control systems to manage CSR strategy: A levers of control perspective	MAR	216
4	(Speklé & Verbeeten, 2014)	The use of performance measurement systems in the public sector: Effects on performance	MAR	206
5	(Rodrigue et al., 2013)	Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective	MAR	158
6	(Pondeville et al., 2013)	Environmental management control systems: The role of contextual and strategic factors	MAR	149
7	(David S. Bedford, 2015)	Management control systems across different modes of innovation: Implications for firm performance	MAR	151
8	(Goretzki et al., 2013)	An institutional perspective on the changes in management accountants' professional role	MAR	131
9	(Banker & Byzalov, 2014)	Asymmetric cost behavior	JMAR	130
10	(Banker et al., 2014)	The moderating effect of prior sales changes on asymmetric cost behavior	JMAR	127
(Sour	ce: scopus.com)			

Of all the articles that have been published over the last decade, the one with the highest impact is a study from Otley (2016) entitled "The contingency theory of management accounting and control: 1980-2014". The total number of citations of this article as of February 1, 2023, is 262 (scopus.com). This seems reasonable considering that studies of management accounting generally use the contingency theory approach (Garcia Osma et al., 2018; Guenther & Heinicke, 2019; Hadid & Al-Sayed, 2021; Janka & Guenther, 2018; Qiu et al., 2023). We display the 10 articles with the highest high impact in Table 2. In terms of researchers with the highest productivity, Henri C. Dekker is the author with the most articles published in the last decade. A total of six articles shows Dekker as the first author, while for the remainder (five documents) he is a co-author. Dekker's research is dominated by contract and interfirm relationship issues (Table 3).

Table 3

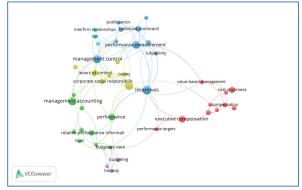
Article Publication by Dekker, H.C. (2013-2022)

Author(s)	Title	Year	Source title
Dekker H.C., Sakaguchi J., Kawai T.	Beyond the contract: Managing risk in supply chain relations	2013	MAR
Ding R., Dekker H.C., Groot T.	Risk, partner selection and contractual control in interfirm relationships	2013	MAR
Anderson S.W., Christ M.H., Dekker H.C., Sedatole K.L.	The use of management controls to mitigate risk in strategic alliances: Field and survey evidence	2014	JMAR
Dekker H.C.	On the boundaries between intrafirm and interfirm management accounting research	2016	MAR
Dekker H.C., Groot T., Schoute M.	A balancing act? the implications of mixed strategies for performance measurement system design	2013	JMAR
Dekker H.C., Ding R., Groot T.	Collaborative performance management in interfirm relationships	2016	JMAR
Essa S.A.G., Dekker H.C., Groot T.L.C.M.	Your gain my pain? The effects of accounting information in uncertain negotiations	2018	MAR
Anderson S.W., Dekker H.C., Sedatole K.L., Wiersma E.	When one size does not fit all: Using ex post subjective ratings to provide parity in risk- adjusted compensation	2020	MAR
Dekker H.C., Kawai T., Sakaguchi J.	Contracting abroad: A comparative analysis of contract design in host and home country outsourcing relations	2018	MAR
Dekker H.C., Kawai T., Sakaguchi J.	The interfirm contracting value of management accounting information	2019	JMAR
Smeulders D., Dekker H.C., Van den Abbeele A.	Information availability in acquisition decisions: The role of prior relations and rival bidders	2019	JMAR

(source: scopus.com)

According to the results of the VOSviewer analysis, judging from the occurrence of keywords in management accounting research in the last ten years, there are 43 keyword items that frequently appear in the two journals. Judging from the level of relationship strength between keyword items, VOSviewer groups the 43 keyword items into six clusters (Fig. 1). The first cluster (red), consists of keywords such as CFO, compensation, corporate governance, cost stickiness, earning management, executive compensation, performance measures, performance targets, and value-based management. We call this first cluster the governance and performance management cluster. Furthermore, the second cluster (green) consists of the keyword items budgetary slack, competition, contingency theory, control, experiments, management accounting, management control systems, performance, relative performance information, and trust. We call this the management control cluster.

Cluster three (dark blue) consists of balanced scorecards, incentives, management control, performance evaluation, measurement, popular culture, public sector, and subjective performance evaluation. We call this the performance evaluation cluster. Cluster four (dark green) consists of corporate social responsibility, enterprise risk management, innovation, levers of control, management control system, and performance management. We call this the risk-based and CSR-based performance management cluster. The fifth cluster (purple) consists of budgeting, honesty, and participative budgeting, so we named it the budgeting and ethical cluster. The sixth and last cluster (light blue) is fairness, interfirm relationship and risk, so we call it the risk and interfirm relationship cluster.



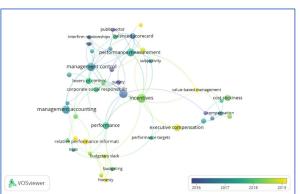


Fig. 1. Management Accounting Research Cluster, 2013 – 2022



To identify the trends in management accounting research, we use Fig. 2 to display an overlay visualization over time during the last decade. The oldest period is where the items are shown in dark blue, while in the most recent period, items are shown in green and yellow (2018-2022). According to observations based on the VOSviewer results, there are six research topics discussed in the most recent period. First, research on competition in relation to the control management system. Second, research related to performance using relative performance information. Third, related to budgeting, there are discussions related to honesty and budgetary slack. Fourth, executive compensation in the context of governance and achievement of performance targets. Fifth, value-based management is associated with performance management and management control. The sixth topic relates to subjectivity-based performance evaluation and the balanced scorecard.

3.2 Exploration of Theory Use in Management Accounting Research 2018–2022

In the last five years, research on management accounting journals has always been linked to performance, both performance measurement and performance evaluation. These studies link performance with management control systems, levers of control, compensation/incentives, and management accounting practices. The keywords that have dominated management accounting research over the past five years are compensation and incentives, performance measures, relative performance information, and management control.

We identify the theories that are used in management accounting research. We only review the theories explicitly stated by the authors in the two management accounting journals. There are at least ten dominant theories used as the basis for research in the journals, namely agency theory, economic theory, social identity theory, social comparison theory, contingency theory, contract theory, goal-setting theory, practice theory, self-determination theory, and social exchange theory. Other theories that are also used in management accounting research in these two journals include cost behavior theory, creativity theory, decision theory, diffusion theory, efficient wage theory, self-awareness theory, firm theory, flow theory, game theory, governance theory, guilt aversion theory, imprinting theory, inequity aversion theory, resource-based view (RBV) theory, reasoning theory, relative performance evaluation (RPE) theory, seduction theory, social-cognitive theory, and upper echelon theory. In this study, we only review the ten dominant theories used in the journals.

3.2.1 Agency theory

Jensen and Meckling (1976) define an agency relationship as a contract where there are certain parties (as principals) who employ other parties (called agents) to carry out various activities on behalf of the principals who confer decision-making authority to the agents. The theory about the existence of differences in interests between the two parties is used by management accounting researchers to explain how compensation or incentives are used to reduce these differences. The model based on agency theory shows that employees with more complex tasks (white collar employees, accounting and finance executives) may have more information and greater discretion, so an optimal incentive compensation design is needed (Ikäheimo et al., 2018; Jorgensen et al., 2020). Even though agency theory is generally used to explain profit-oriented companies, non-profit companies also experience agency problems. The general public (as donors) becomes active in monitoring to ensure that their investment is used properly. Good governance needs to be prepared by board members. Boland et al. (2022) observe that organizations that report relationships between board members have less management outlay, lower levels of excess cash, better quality of reporting, and they receive higher contributions. Agency theory is also used by researchers in examining the relationship between compensation and taxes. Agency theory surmises that shareholders should incentivize managers to maximize earnings by lowering tax obligations whenever possible (Kubick & Yazzie, 2021). This also includes efforts by top management to increase subsidiary cooperation leading to an efficient tax avoidance strategy (Wang et al., 2022).

3.2.2 Economic theory

According to economic theory, welfare maximization requires the marginal equation of benefits and costs. Standard neoclassical economic theory stipulates that, as shareholders' agents, managers must minimize corporation tax costs by whatever legal methods (Inger & Vansant, 2019). The neoclassical theory of economics predicts that cash will be preferred over non-monetary incentives of similar market value and will offer higher motivation due to its high option value (Heninger et al., 2019). Economic theory is used as a basis for researching executive bonus contracts (Choi et al., 2021; Gong et al., 2021), capital budgeting decisions (Fehrenbacher et al., 2020), market valuation in relation to taxes violations of debt covenants (Bourveau et al., 2022), and cost structures and cost-based transfer pricing (Friis, 2020; Plummer & Wempe, 2021).

3.2.3 Social identity theory

Social identity theory was introduced by Tajfel & Turner (1986) and it defines a group as a collection of people who categorize themselves as part of the same social category and internalize the defining attributes of social category identity to define and evaluate themselves (Hogg, 2021). Social identity theory argues that people strive to achieve and maintain a positive sense of difference for their group membership. This theory considers how group membership is incorporated into people's self-concept and how this affects their views of other members of the group, of people who are not from our group, and of members of rival groups (Neighbors et al., 2013). Social identity theory is widely used in experimental laboratory research published in management accounting journals. For example, research on the influence of superior-subordinate identity on rewards and performance (Burt et al., 2020), managers' intentions in sharing knowledge with internal auditors (Seymore & Robertson, 2020), and the role of consultant types in communicating project escalation (Loh et al., 2019).

3.2.4 Social comparison theory

Social comparison theory was first proposed by Festinger (1954). This theory states that social comparison is a social process in which individuals compare themselves with others. This theory is used by management accounting researchers in testing how relative performance information influences decisions or performance (Newman et al., 2022). In addition, this theory is also used to examine the efforts or behavior of managers and team members when team member compensation is not differentiated (Hecht et al., 2019) and how subordinates' behavior and performance are affected when the salary dispersion with their superiors is too high (X. Liu et al., 2020). This theory is also used to examine the influence of coworkers' input and output on productivity (Yatsenko, 2022). Research with social comparison theory in management accounting research tends to be carried out using laboratory experiment methods. Only Carroll & Marginson (2021) have used this theory to base their research on managers' cognitive, emotional, and dysfunctional behavioral processes.

3.2.5 Contingency theory

Contingency theory, particularly for management accounting, was proposed by Otley (1980). He argues that there is no universally applicable management accounting system that applies uniformly to all organizations in all situations. The specific characteristics of a suitable accounting system will depend on the unique circumstances of the organization. Consequently, the contingency theory must identify certain aspects of the accounting system that are related to certain predetermined conditions and show the appropriate relationships. Contingency theory is used in research on management accounting practices (Hadid & Al-Sayed, 2021; Qiu et al., 2023), performance measurement systems (Guenther & Heinicke, 2019), and management control systems (Garcia Osma et al., 2018; Janka & Guenther, 2018).

3.2.6 Contract theory

Contract theory examines, from an economic perspective, how economic actors construct contractual arrangements, usually under conditions of information asymmetry. Because it deals with agency and incentives, contract theory is often associated with the arrangement of optimal compensation for managers. Therefore, this theory is used in research on contract design (Dekker et al., 2019; Hu et al., 2021; Kim, 2020; C. Liu et al., 2021).

3.2.7 Goal-setting theory

Goal-setting theory was made popular by Locke (1968). This theory is used to understand how goal-setting procedures affect work motivation and performance. Goal-setting is basically related to task performance. Specific and challenging goals accompanied by appropriate feedback contribute to higher and better task performance. An understanding of goal-setting will assist management in helping employees achieve their goals so that they can achieve better organizational success. There is research on target-setting related to incentives (Lourenço et al., 2018), and also in a multi-task and multi-divisional environment (Balakrishnan et al., 2022; Feichter et al., 2018).

3.2.8 Practice theory

The practice theory used in management accounting research is the theory proposed by Schatzki (2002). This theory states that people do what makes sense for them to do. Practice is defined as a collection of activities organized according to norms, teleo-affective structures, as well as practical and general understanding. Norms limit the way we do things. The teleo-affective structure refers to a practice-oriented set of goals, along with the appropriate emotions for pursuing these goals. Common understanding refers to shared beliefs, concerns, or destiny, which may be common to several practices. Finally, practical understanding has to do with how we carry out certain tasks. Focusing on individual activities, Schatzki's theory of practice provides a complete and dynamic understanding of how actors manage pressures from organizations in their organizational practices. This theory is widely used in management accounting research based on research in the field (Ahrens et al., 2020; Laguecir et al., 2020; Ligonie, 2021).

3.2.9 Self-determination theory

Self-determination theory was introduced by Deci & Ryan (1980). Self-determination is a more fundamental factor because competence must be attained within the context of self-determination in order for there to be intrinsic satisfaction. Acquisition of competencies that are compulsory rather than selected is not intrinsically driven. In these relationships, they must experience themselves as competent and independent. Their sense of competence and autonomy generates intrinsic satisfaction and is a precondition for mental wellness. Self-determination theory is a theory about motivation and personality pertaining to people's intrinsic growth inclinations and psychological requirements. It refers to the internal forces that drive people's decisions in the absence of external influences and deviations. This theory focuses on the extent to which human conduct is motivated and determined by the individual. This theory is used in survey research to test autonomous work motivation (Chen et al., 2020; Van der Hauwaert et al., 2022). Holderness et al. (2020) used this theory in a laboratory experiment to test the effect of feedback frequency on performance.

3.2.10 Social exchange theory

Social exchange theory is used as a basis for explaining social conformity and approval when carrying out a particular job. The behavior of subjects in studies that examine conformity and approval is assumed to reflect preferences in the same manner as it does in economics studies. Predictions made based on the exchange model are found to be consistent with the existing knowledge about conformity. The process of social conformity is dynamic whereby the influences—from those who influence and those who are influenced—occur simultaneously (Nord, 1969). Social exchange theory uses sociological and psychological theories to study social behavior in the interaction of two parties by applying cost and benefit analyses to determine risks and benefits. This theory is used in management accounting research to examine negotiations and transfer pricing (Chong et al., 2018; Essa et al., 2018; Groen, 2018).

3.3 Exploration of Methods Used in Management Accounting Research 2018–2022

We classified the research methods found in published articles based on the approach of Casas-Arce et al. (2022). These methods include archival data, surveys, field research, and experiments. In addition to these methods, we also obtained articles that presented literature reviews (including bibliometric analysis and conceptual papers) as well as model propositions. Table 4 presents the number of articles in both journals according to the research method used. Thus, we can see that the research method that dominates the management accounting journals is archival data (72 articles), followed by experiments (63 articles), surveys (32 articles), and field research (30 articles). When the two management accounting journals are compared, the articles in JMAR are dominated by those using the archival method (53 articles), while MAR is dominated by papers using experiments and field research (24 articles each).

Table 4

Distribution of Article Publication based on Method (2018 - 2022)

Method	JMAR	MAR	Total
Archival	36.81%	22.89%	31.72%
Experiment	27.08%	28.92%	27.75%
Survey	15.97%	10.84%	14.10%
Field Research	4.17%	28.92%	13.22%
Bibliometrics/Conceptual/Literature/Critical Review	8.33%	3.61%	6.61%
Model Proposition	4.86%	4.82%	4.85%
Research Design	2.78%	0.00%	1.76%

3.3.1 Archival Data

Archival data-based research provides a lens for looking at what firms do that may be illuminating with regard to the decisionmaking and planning processes, as well as how firms adapt to the use of technology (Casas-Arce et al., 2022). Research that uses archival data has tended to decrease over the last two years in MAR, while JMAR experienced a decline in 2022. For archival data-based research, the topics of interest over the last five years have been incentives, compensation, and welfare (Anderson et al., 2020; Hesford et al., 2020; Jorgensen et al., 2020), cost behavior, structure, and management (Brisker et al., 2022; Chang et al., 2021), and performance measurement (García Osma et al., 2022; Knauer et al., 2018; Sunwoo et al., 2021).

By using various observation periods for panel data—which have ranged from three years to 26 years—this method helps researchers to see the effect of the independent variables on the dependent variable. The analysis technique used in archival research is predominantly by regression analysis. Some researchers mention the use of specific regression analyses which are seemingly unrelated to regression (Hesford et al., 2020), generalized methods of moments (GMM) regressions and general estimating equations (GEE) regression (Firk et al., 2019). For regression measurements with a dummy dependent variable, the analysis used is logistic regression (Cadman et al., 2020; Kim, 2020; Krishnan et al., 2021). In addition, several studies have also used partial least squares structural equation modeling (Hadid & Al-Sayed, 2021). Researchers using the archival method also conduct robustness tests to corroborate their research results in the field of management accounting.

3.3.2 Experiment

Experimental research, both in the laboratory and in the field, can provide a more reliable inference about causality, as well as offer a window into counterfactuals that might otherwise be unobservable in the real world (for example, the outcome from a decision that has not been taken). In addition, if those experiments are conducted in the field, there is the added benefit of using professionals in a real decision-making setting that is relevant for practice (Casas-Arce et al., 2022). The two management accounting journals examined in this study exhibit an increasing trend of experimental research papers. In fact, JMAR has specifically published papers on experimental research design in management accounting research, namely a framework for conducting numerical experiments on cost system design (Anand et al., 2019) and deception in management accounting experimental research (Libby & Salterio, 2019). In conducting the tests, most experimental researchers have used analysis of variance (ANOVA) techniques, in addition to regression analysis. Experimental research in management accounting journals is dominated by laboratory experiments (60 articles) while only three articles use field experiments.

In laboratory experiments, the participants involved were predominantly students—that is to say, undergraduates, graduates, postgraduates, and alumni—especially from universities or schools specializing in business and accounting. In addition, there are also participants from an entrepreneurship course (Hoos, 2022), members of the Chartered Institute of Management (Fehrenbacher et al., 2020), and risk managers (Holderness et al., 2020). Some research has used the Amazon Mechanical Turk (MTurk) platform to find participants for experiments (Black et al., 2022; Brown et al., 2022; Chen et al., 2022; Kreilkamp et al., 2021; Newman et al., 2022).

As for field-experiment research, management accounting journals have published three articles in the last five years, namely the effect of feedback when participants are presented with negative incentives involving 181 hospital physicians (Lourenço et al., 2018), organizational control in the context of wellness programs in educational institutions (Heninger et al., 2019), and field experiments with sales representatives to test whether higher preferences for incentives will encourage better performance in retail companies (Lourenço, 2020).

3.3.3 Field Research

The field research-based method dominates papers published by MAR and this has tended to increase in the last two years in contrast to JMAR. The purpose of studies using this method is to explore in depth certain management accounting practices in an organization. For example: how the visualization of accounting can increase productive tensions (Busco & Quattrone, 2018); how the founders' commitment blueprint affects the design and use of management control systems (Akroyd & Kober, 2019); how accounting is used to underpin a multi-facetted counter-conduct that seeks to profile itself locally and nationally against austerity as a highly visible and controversial government program (Ahrens et al., 2020); the dual role of management accounting in overcoming conflicting expectations (Puyou, 2018); management control design in long-term relationships between buyers and suppliers (Stouthuysen et al., 2019); and how companies make efforts to integrate sustainability into corporate strategy and its application in business activities (Beusch et al., 2022). The organizations used as venues for field studies range from the those operating in the fashion industry (Busco & Quattrone, 2018), government organizations (Ahrens et al., 2020), defense organizations (Christensen et al., 2019), and the retail industry (Agndal & Nilsson, 2019). Data collection techniques used for implementing this method are in the form of observation, documentation, and—most importantly—interviews. The data obtained are analyzed using coding or thematic analysis.

3.3.4 Survey

Survey methods are commonly used by researchers to see how decision-making and planning processes are carried out in an organization (Casas-Arce et al., 2022). MAR has tended to have an increasing trend of publishing articles employing this method. This is in contrast to JMAR, which is actually experiencing a downward trend. Even so, JMAR specifically published four articles on survey design in 2018. First, there was one discussing the challenging issues in survey research (Speklé & Widener, 2018). Two articles reviewed construct validity (Bedford & Speklé, 2018a; Bedford & Speklé, 2018b). The fourth

one discussed the response rate (Hiebl & Richter, 2018). Research topics of interest related to survey methods include performance measurement systems (Guenther & Heinicke, 2019; Van der Hauwaert et al., 2022), enterprise risk management (Braumann, 2018; Ittner & Oyon, 2020), and management accounting information (Dekker et al., 2019; Holm & Ax, 2020; Ten Rouwelaar et al., 2021).

Surveys used in management accounting research involve tens to thousands of respondents (Casas-Arce et al., 2020). These respondents have included employees, senior managers, controllers, CFOs, business unit managers, and independent directors. As for the response rates, the researchers have mostly reported them explicitly. The average response rate reported in management accounting journals for the 2018-2022 period is 26.80 percent. In survey research, the response rate is an important factor because high response rates present an opportunity to achieve large sample sizes (Hiebl & Richter, 2018). Researchers using the survey method have overcome the problem of low response rates by conducting nonresponse bias testing. Researchers also ensure the validity and reliability of their research results in certain ways including by conducting common method bias tests.

4. Conclusion and Suggestion

This study on the mapping of management accounting research has been carried out by the authors in order to identify the trends in this field in the last decade. Trends in management accounting research also show management accounting practices that occur in organizations. Judging from the occurrence of keywords, we can see that management accounting practices are closely related to management control systems, organizational performance appraisal, compensation and incentive systems, organizational governance, value-based management, budgeting, balanced scorecards, individual performance evaluation, and risk management.

During the last five years, researchers have used several theories that underlie their research. The predominant one is agency theory followed by the economic, social identity, social comparison, and contingency theories. Other theories are also used in management accounting research but in a more limited number of studies, for example, imprinting theory, creativity theory, guilt aversion theory, and seduction theory. At least, their use in the conducting of research in this field provides opportunities for management accounting researchers to explore these theories.

The research methods used in management accounting journals tend to be dominated by archival data although it is a decreasing trend. The research method that has an increasing trend is the experimental method. This provides adequate research opportunities for researchers to utilize the experimental method in answering their research questions, if possible. The use of surrogate participants and online experiments will help researchers maximize their research results. For field research studies and surveys, MAR has tended to experience an increase in the number of publications as compared to JMAR. Future researchers could consider this when they are going to have their papers published in a journal.

This research has limitations. We only map management accounting research that is published in journals that have management accounting in their title. Other journals, of course, also publish management accounting research, so we cannot provide a broad overview of management accounting trends. Future research could consider using these other journals, for example, the Accounting Organization Society, Contemporary Accounting Research, and others. When we identify the theory used in management accounting research, we do so based on the theory explicitly stated in the article. Even so, further management accounting research could consider exploring the use of a particular theory in management accounting research to enrich the understanding of researchers in answering certain issues.

References

- Agndal, H., & Nilsson, U. (2019). The fast and the furious: The role of entrainment in controlled inter-organizational relationship transformation. *Management Accounting Research*, 43, 15–28. https://doi.org/10.1016/j.mar.2018.09.001
- Ahrens, T., Ferry, L., & Khalifa, R. (2020). Governmentality and counter-conduct: A field study of accounting amidst concurrent and competing rationales and programmes. *Management Accounting Research*, 48, 100686. https://doi.org/10.1016/j.mar.2020.100686
- Akroyd, C., & Kober, R. (2019). Imprinting founders' blueprints on management control systems. Management Accounting Research, 46, 100645. https://doi.org/10.1016/j.mar.2019.07.002
- Anand, V. V., Balakrishnan, R., & Labro, E. (2019). A framework for conducting numerical experiments on cost system design. *Journal of Management Accounting Research*, 31(1), 41–61. https://doi.org/10.2308/jmar-52057
- Anderson, S. W., Dekker, H. C., Sedatole, K. L., & Wiersma, E. (2020). When one size does not fit all: Using ex post subjective ratings to provide parity in risk-adjusted compensation. *Management Accounting Research*, 49, 100706. https://doi.org/10.1016/j.mar.2020.100706
- Arjaliès, D. L., & Mundy, J. (2013). The use of management control systems to manage CSR strategy: A levers of control perspective. *Management Accounting Research*, 24(4), 284–300. https://doi.org/10.1016/J.MAR.2013.06.003
- Balakrishnan, R., Huang, J., & Wu, A. (2022). Target Setting in a Multi-Task Environment: An Empirical Investigation. Journal of Management Accounting Research, 34(3), 11–28. https://doi.org/10.2308/jmar-2021-024
- Banker, R. D., & Byzalov, D. (2014). Asymmetric Cost Behavior. *Journal of Management Accounting Research*, 26(2), 43–79. https://doi.org/10.2308/jmar-50846
- Banker, R. D., Byzalov, D., Ciftci, M., & Mashruwala, R. (2014). The moderating effect of prior sales changes on asymmetric cost behavior. *Journal of Management Accounting Research*, 26(2), 221–242. https://doi.org/10.2308/jmar-50726

- Bedford, D.S., & Speklé, R. F. (2018). Construct validity in survey-based management accounting and control research. Journal of Management Accounting Research, 30(2), 23–58. https://doi.org/10.2308/jmar-51995
- Bedford, David S. (2015). Management control systems across different modes of innovation: Implications for firm performance. *Management Accounting Research*, 28, 12–30. https://doi.org/10.1016/j.mar.2015.04.003
- Bedford, David S., & Speklé, R. F. (2018). Constructs in survey-based management accounting and control research: An inventory from 1996 to 2015. *Journal of Management Accounting Research*, 30(2), 269–322. https://doi.org/10.2308/jmar-51994
- Beusch, P., Frisk, J. E., Rosén, M., & Dilla, W. (2022). Management control for sustainability: Towards integrated systems. *Management Accounting Research*, 54, 100777. https://doi.org/10.1016/j.mar.2021.100777
- Black, P. W., Meservy, T. O., Tayler, W. B., & Williams, J. O. (2022). Surrogation Fundamentals: Measurement and Cognition. Journal of Management Accounting Research, 34(1), 9–29. https://doi.org/10.2308/JMAR-2020-071
- Boland, C. M., Harris, E. E., & Neely, D. G. (2022). Nonprofit Governance: Are Related Board Members Bad for Nonprofits? Journal of Management Accounting Research, 34(2), 23–41. https://doi.org/10.2308/JMAR-2020-020
- Bourveau, T., Stice, D., & Wang, R. (2022). Strategic Disclosure and Debt Covenant Violation. Journal of Management Accounting Research, 34(3), 29–57. https://doi.org/10.2308/jmar-2020-007
- Braumann, E. C. (2018). Analyzing the role of risk awareness in enterprise risk management. *Journal of Management Accounting Research*, 30(2), 241–268. https://doi.org/10.2308/jmar-52084
- Brisker, E. R., Park, J. C., & Song, H. (2022). Managers' Equity Incentives and Asymmetric Cost Behavior. Journal of Management Accounting Research, 34(2), 43–69. https://doi.org/10.2308/JMAR-17-029
- Bromwich, M., & Scapens, R. W. (2016). Management Accounting Research: 25 years on. Management Accounting Research, 31, 1–9. https://doi.org/10.1016/j.mar.2016.03.002
- Brown, J. L., Sprinkle, G. B., & Way, D. (2022). The Effects of Multi-Level Group Identification on Intergroup Helping Behavior. *Journal of Management Accounting Research*, 34(1), 97–116. https://doi.org/10.2308/JMAR-2019-506
- Burt, I., Libby, T., & Presslee, A. (2020). The impact of superior-subordinate identity and Ex post discretionary goal adjustment on subordinate expectancy of reward and performance. *Journal of Management Accounting Research*, 32(1), 31–49. https://doi.org/10.2308/jmar-52559
- Busco, C., & Quattrone, P. (2018). In Search of the "Perfect One": How accounting as a maieutic machine sustains inventions through generative 'in-tensions.' *Management Accounting Research*, 39, 1–16. https://doi.org/10.1016/j.mar.2017.02.002
- Cadman, B., Carrizosa, R., & Peng, X. (2020). Compensation disclosures and corporate governance through shareholder voting. *Journal of Management Accounting Research*, 32(3), 27–48. https://doi.org/10.2308/jmar-18-046
- Carroll, E., & Marginson, D. (2021). Relative performance information and social comparisons: Exploring managers' cognitive, emotional and dysfunctional behavioral processes. *Management Accounting Research*, 53, 100768. https://doi.org/10.1016/j.mar.2021.100768
- Casas-Arce, P., Cheng, M. M., Grabner, I., & Modell, S. (2022). Managerial Accounting for Decision-Making and Planning. Journal of Management Accounting Research, 34(1), 1–7. https://doi.org/10.2308/jmar-10784
- Casas-Arce, P., Indjejikian, R. J., & Matějka, M. (2020). Bonus plan choices during an economic downturn. Journal of Management Accounting Research, 32(2), 85–105. https://doi.org/10.2308/jmar-52548
- Chang, H., Hall, C. M., & Paz, M. T. (2021). Suppliers' product market competition, customer concentration, and cost structure. Journal of Management Accounting Research, 33(3), 9–27. https://doi.org/10.2308/JMAR-17-070
- Chen, C. X., Hudgins, R., & Wright, W. F. (2022). The Effect of Advice Valence on the Perceived Credibility of Data Analytics. *Journal of Management Accounting Research*, 34(2), 97–116. https://doi.org/10.2308/JMAR-2020-015
- Chen, C. X., Lill, J. B., & Vance, T. W. (2020). Management control system design and employees' autonomous motivation. *Journal of Management Accounting Research*, 32(3), 71–91. https://doi.org/10.2308/jmar-17-068
- Choi, S., Kim, S., Kwon, S., & Shin, J. Y. (2021). Analyst forecasts and target setting in executive annual bonus contracts. *Journal of Management Accounting Research*, 33(2), 19–42. https://doi.org/10.2308/JMAR-18-075
- Chong, V. K., Loy, C. Y., Masschelein, S., & Woodliff, D. R. (2018). The effect of performance evaluation schemes on predicted transfer prices: Do leadership tone and perceived fairness concerns matter? *Management Accounting Research*, 41, 11–19. https://doi.org/10.1016/j.mar.2018.02.003
- Christensen, M., Skærbæk, P., & Tryggestad, K. (2019). Contested organizational change and accounting in trials of incompatibility. *Management Accounting Research*, 45, 100641. https://doi.org/10.1016/j.mar.2019.03.001
- Ciger, A. (2020). Audit Quality: A Bibliometric Analysis (1981-2020). Scientific Annals of Economics and Business, 67(4), 473–494. https://doi.org/10.47743/SAEB-2020-0031
- Deci, E. L., & Ryan, R. M. (1980). The Empirical Exploration of Intrinsic Motivational Processes. Advances in Experimental Social Psychology, 13(C), 39–80. https://doi.org/10.1016/S0065-2601(08)60130-6
- Dekker, H. C., Kawai, T., & Sakaguchi, J. (2019). The interfirm contracting value of management accounting information. Journal of Management Accounting Research, 31(2), 59–74. https://doi.org/10.2308/jmar-52058
- Essa, S. A. G., Dekker, H. C., & Groot, T. L. C. M. (2018). Your gain my pain? The effects of accounting information in uncertain negotiations. *Management Accounting Research*, 41, 20–42. https://doi.org/10.1016/j.mar.2018.02.002
- Fehrenbacher, D. D., Kaplan, S. E., & Moulang, C. (2020). The role of accountability in reducing the impact of affective reactions on capital budgeting decisions. *Management Accounting Research*, 47, 100650. https://doi.org/10.1016/j.mar.2019.100650
- Feichter, C., Grabner, I., & Moers, F. (2018). Target setting in multi-divisional firms: State of the art and avenues for future

research. Journal of Management Accounting Research, 30(3), 29–54. https://doi.org/10.2308/JMAR-52158

- Festinger, L. (1954). A theory of social comparison: processes human relations. In *Human Relations* (Vol. 7, pp. 117–140). https://journals.sagepub.com/doi/abs/10.1177/001872675400700202
- Firk, S., Schmidt, T., & Wolff, M. (2019). CFO emphasis on value-based management: Performance implications and the challenge of CFO succession. *Management Accounting Research*, 44, 26–43. https://doi.org/10.1016/j.mar.2018.11.001
- Friis, I. (2020). Preservation of incentives inside the firm: A case study of a Quasi-market for cost-based transfer pricing. Journal of Management Accounting Research, 32(2), 137–157. https://doi.org/10.2308/jmar-52562
- Garcia Osma, B., Gomez-Conde, J., & de las Heras, E. (2018). Debt pressure and interactive use of control systems: Effects on cost of debt. *Management Accounting Research*, 40, 27–46. https://doi.org/10.1016/j.mar.2017.10.001
- García Osma, B., Gomez-Conde, J., & Lopez-Valeiras, E. (2022). Management control systems and real earnings management: Effects on firm performance. *Management Accounting Research*, 55, 100781. https://doi.org/10.1016/j.mar.2021.100781
- Gong, G., Wang, J., & Lee, H. J. (2021). Ceo employment contract horizon and financial reporting discretion. Journal of Management Accounting Research, 33(2), 75–108. https://doi.org/10.2308/JMAR-16-123
- Goretzki, L., Strauss, E., & Weber, J. (2013). An institutional perspective on the changes in management accountants' professional role. *Management Accounting Research*, 24(1), 41–63. https://doi.org/10.1016/J.MAR.2012.11.002
- Groen, B. A. C. (2018). A survey study into participation in goal setting, fairness, and goal commitment: Effects of including multiple types of fairness. *Journal of Management Accounting Research*, 30(2), 207–240. https://doi.org/10.2308/jmar-52072
- Guenther, T. W., & Heinicke, A. (2019). Relationships among types of use, levels of sophistication, and organizational outcomes of performance measurement systems: The crucial role of design choices. *Management Accounting Research*, 42, 1–25. https://doi.org/10.1016/j.mar.2018.07.002
- Guffey, D. M., & Harp, N. L. (2017). The journal of management accounting research: A content and citation analysis of the first 25 years. *Journal of Management Accounting Research*, 29(3), 93–110. https://doi.org/10.2308/jmar-51592
- Hadid, W., & Al-Sayed, M. (2021). Management accountants and strategic management accounting: The role of organizational culture and information systems. *Management Accounting Research*, 50, 100725. https://doi.org/10.1016/j.mar.2020.100725
- Hecht, G., Newman, A. H., & Tafkov, I. D. (2019). Managers' strategic use of discretion over relative performance information provision and implications for team-members' effort. *Management Accounting Research*, 45, 100638. https://doi.org/10.1016/j.mar.2019.01.001
- Heninger, W. G., Smith, S. D., & Wood, D. A. (2019). Reward type and performance: An examination of organizational wellness programs. *Management Accounting Research*, 44, 1–11. https://doi.org/10.1016/j.mar.2019.02.001
- Herschung, F., Mahlendorf, M. D., & Weber, J. (2018). Mapping quantitative management accounting research 2002–2012. Journal of Management Accounting Research, 30(1), 73–141. https://doi.org/10.2308/jmar-51745
- Hesford, J. W., Mangin, N., & Pizzini, M. (2020). Using fixed wages for management control: An intra-firm test of the effect of relative compensation on performance. *Journal of Management Accounting Research*, 32(3), 137–154. https://doi.org/10.2308/jmar-18-070
- Hiebl, M. R. W., & Richter, J. F. (2018). Response rates in management accounting survey research. Journal of Management Accounting Research, 30(2), 59–79. https://doi.org/10.2308/jmar-52073
- Hogg, M. A. (2021). Self-uncertainty and group identification: Consequences for social identity, group behavior, intergroup relations, and society. *Advances in Experimental Social Psychology*, 64, 263–316. https://doi.org/10.1016/BS.AESP.2021.04.004
- Holderness, D. K., Olsen, K. J., & Thornock, T. A. (2020). Assigned versus chosen relative performance information: The effect of feedback frequency on performance. *Journal of Management Accounting Research*, 32(1), 137–158. https://doi.org/10.2308/jmar-52504
- Holm, M., & Ax, C. (2020). The interactive effect of competition intensity and customer service competition on customer accounting sophistication—Evidence of positive and negative associations. *Management Accounting Research*, 46, 100644. https://doi.org/10.1016/j.mar.2019.07.001
- Hoos, F. (2022). Showing off or showing impact? The joint signalling effect of reputation and accountability on social entrepreneurs' crowdfunding success. *Management Accounting Research*, 54, 100778. https://doi.org/10.1016/j.mar.2021.100778
- Hu, P. K., Li, Y., & Ray, K. (2021). Optimal performance targets. *Journal of Management Accounting Research*, 33(2), 129–149. https://doi.org/10.2308/JMAR-18-032
- Ikäheimo, S., Kallunki, J. P., Moilanen, S., & Schiehll, E. (2018). Do white-collar employee incentives improve firm profitability? *Journal of Management Accounting Research*, 30(3), 95–115. https://doi.org/10.2308/JMAR-51902
- Inger, K. K., & Vansant, B. (2019). Market valuation consequences of avoiding taxes while also being socially responsible. Journal of Management Accounting Research, 31(2), 75–94. https://doi.org/10.2308/jmar-52169
- Ittner, C. D., & Oyon, D. F. (2020). Risk ownership, erm practices, and the role of the finance function. Journal of Management Accounting Research, 32(2), 159–182. https://doi.org/10.2308/jmar-52549
- Janka, M., & Guenther, T. W. (2018). Management control of new product development and perceived environmental uncertainty: Exploring heterogeneity using a finite mixture approach. *Journal of Management Accounting Research*, 30(2), 131–161. https://doi.org/10.2308/jmar-52019

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(4), 305–360.
- Jorgensen, B. N., Patrick, P. H., & Soderstrom, N. S. (2020). Heaping of executive compensation. *Journal of Management Accounting Research*, 32(1), 177–201. https://doi.org/10.2308/jmar-52477
- Kim, J. (2020). When Organizational Performance Matters for Personnel Decisions: Executives' Career Patterns in a Conglomerate. *Management Accounting Research*, 49, 100695. https://doi.org/10.1016/j.mar.2020.100695
- Knauer, T., Silge, L., & Sommer, F. (2018). The shareholder value effects of using value-based performance measures: Evidence from acquisitions and divestments. *Management Accounting Research*, 41, 43–61. https://doi.org/10.1016/j.mar.2018.02.001
- Kreilkamp, N., Matanovic, S., Sommer, F., & Wöhrmann, A. (2021). The effect of compensation caps on risk-taking. *Journal of Management Accounting Research*, 33(3), 77–95. https://doi.org/10.2308/JMAR-18-053
- Krishnan, G. V., Wang, C., & Yu, W. (2021). Do high ability managers mitigate litigation related to financial reporting? Journal of Management Accounting Research, 33(1), 171–196. https://doi.org/10.2308/jmar-18-034
- Kubick, T. R., & Yazzie, C. E. (2021). Compensation and taxes: Evidence from relative performance evaluation. Journal of Management Accounting Research, 33(1), 75–101. https://doi.org/10.2308/JMAR-19-062
- Laguecir, A., Kern, A., & Kharoubi, C. (2020). Management accounting systems in institutional complexity: Hysteresis and boundaries of practices in social housing. *Management Accounting Research*, 49, 100715. https://doi.org/10.1016/j.mar.2020.100715
- Libby, T., & Salterio, S. E. (2019). Deception in management accounting experimental research: "A tricky issue" revisited. Journal of Management Accounting Research, 31(2), 143–158. https://doi.org/10.2308/jmar-52217
- Ligonie, M. (2021). Sharing sustainability through sustainability control activities. A practice-based analysis. *Management Accounting Research*, 50, 100726. https://doi.org/10.1016/j.mar.2020.100726
- Liu, C., Shi, W., & John Wei, K. C. (2021). Ceo expertise and the design of compensation contracts: Evidence from generalist versus specialist ceos. *Journal of Management Accounting Research*, 33(3), 97–119. https://doi.org/10.2308/JMAR-19-019
- Liu, X., Tian, Y., & Zhang, Y. (2020). The joint effects of supervisor pay transparency and vertical pay dispersion on reporting honesty. *Journal of Management Accounting Research*, 32(3), 179–192. https://doi.org/10.2308/jmar-18-080
- Locke, E. A. (1968). Toward a Theory of Task Motivation and Incentives. *Organizational Behavior and Human Performance*, *3*, 157–189.
- Loh, C. Y., Coyte, R., & Cheng, M. M. (2019). Is a fresh pair of eyes always better? The effect of consultant type and assigned task purpose on communicating project escalation concerns. *Management Accounting Research*, 43, 1–14. https://doi.org/10.1016/j.mar.2018.09.002
- Lourenço, S. M. (2020). Do self-reported motivators really motivate higher performance? *Management Accounting Research*, 47, 100676. https://doi.org/10.1016/j.mar.2019.100676
- Lourenço, S. M., Greenberg, J. O., Littlefield, M., Bates, D. W., & Narayanan, V. G. (2018). The performance effect of feedback in a context of negative incentives: Evidence from a field experiment. *Management Accounting Research*, 40, 1–14. https://doi.org/10.1016/j.mar.2018.01.002
- Melnyk, S. A., Bititci, U., Platts, K., Tobias, J., & Andersen, B. (2014). Is performance measurement and management fit for the future? *Management Accounting Research*, 25(2), 173–186. https://doi.org/10.1016/j.mar.2013.07.007
- Neighbors, C., Foster, D. W., & Fossos, N. (2013). Peer Influences on Addiction. Principles of Addiction: Comprehensive Addictive Behaviors and Disorders, Volume 1, 323–331. https://doi.org/10.1016/B978-0-12-398336-7.00033-4
- Newman, A. H., Stikeleather, B. R., & Waddoups, N. J. (2022). How Relative Performance Information Affects Exploration-Exploitation Decisions. *Journal of Management Accounting Research*, 34(1), 75–95. https://doi.org/10.2308/JMAR-2020-070
- Nord, W. R. (1969). Social exchange theory: An integrative approach to social conformity. *Psychological Bulletin*, 71(3), 174–208. https://doi.org/10.1037/h0027032
- Otley, D. (2016). The contingency theory of management accounting and control: 1980-2014. Management Accounting Research, 31, 45–62. https://doi.org/10.1016/j.mar.2016.02.001
- Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. Accounting, Organizations and Society, 5(4), 413–428. https://doi.org/10.1016/0361-3682(80)90040-9
- Plummer, E., & Wempe, W. F. (2021). The effects of healthcare payment systems on skilled nursing facilities' cost structure and human resource strategies. *Journal of Management Accounting Research*, 33(2), 191–210. https://doi.org/10.2308/JMAR-19-044
- Pondeville, S., Swaen, V., & De Rongé, Y. (2013). Environmental management control systems: The role of contextual and strategic factors. *Management Accounting Research*, 24(4), 317–332. https://doi.org/10.1016/J.MAR.2013.06.007
- Puyou, F. R. (2018). Systems of secrecy: Confidences and gossip in management accountants' handling of dual role expectations and MCS limitations. *Management Accounting Research*, 40, 15–26. https://doi.org/10.1016/j.mar.2018.01.001
- Qiu, F., Hu, N., Liang, P., & Dow, K. (2023). Measuring management accounting practices using textual analysis. Management Accounting Research, 58, 100818. https://doi.org/10.1016/j.mar.2022.100818
- Rodrigue, M., Magnan, M., & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. *Management Accounting Research*, 24(4), 301–316.

https://doi.org/10.1016/J.MAR.2013.06.004

- Schatzki, T. R. (2002). The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change. Pennsylvania State University Press.
- Seymore, M., & Robertson, J. C. (2020). Managers' intentions to share knowledge to internal auditors: The effects of procedural fairness and internal auditor type. *Journal of Management Accounting Research*, 32(2), 225–241. https://doi.org/10.2308/jmar-52563
- Speklé, R. F., & Verbeeten, F. H. M. (2014). The use of performance measurement systems in the public sector: Effects on performance. *Management Accounting Research*, 25(2), 131–146. https://doi.org/10.1016/j.mar.2013.07.004
- Speklé, R. F., & Widener, S. K. (2018). Challenging issues in survey research: Discussion and suggestions. Journal of Management Accounting Research, 30(2), 3–21. https://doi.org/10.2308/jmar-51860
- Stouthuysen, K., Van Den Abbeele, A., van der Meer-Kooistra, J., & Roodhooft, F. (2019). Management control design in long-term buyer-supplier relationships: Unpacking the learning process. *Management Accounting Research*, 45, 100643. https://doi.org/10.1016/j.mar.2019.06.001
- Sunwoo, H. Y., Law, J., Lee, W. J., & Oh, S. (2021). The importance of organizational context for the relation between human capital investment and firm performance: evidence from labor unions. *Journal of Management Accounting Research*, 33(1), 197–217. https://doi.org/10.2308/jmar-19-009
- Tajfel, H., & Turner, J. C. (1986). The Social Identity Theory of Intergroup Behavior. In *Psychology of Intergroup Relations* (pp. 7–24). Nelson-Hall. https://doi.org/10.4135/9781483346274.n163
- Ten Rouwelaar, H., Schaepkens, F., & Widener, S. K. (2021). Skills, influence, and effectiveness of management accountants. Journal of Management Accounting Research, 33(2), 211–235. https://doi.org/10.2308/JMAR-18-048
- Trinarningsih, W., Anugerah, A. R., & Muttaqin, P. S. (2021). Visualizing and mapping two decades of literature on board of directors research: a bibliometric analysis from 2000 to 2021. Cogent Business and Management, 8(1). https://doi.org/10.1080/23311975.2021.1994104
- Van der Hauwaert, E., Hoozée, S., Maussen, S., & Bruggeman, W. (2022). The impact of enabling performance measurement on managers' autonomous work motivation and performance. *Management Accounting Research*, 55, 100780. https://doi.org/10.1016/j.mar.2021.100780
- Wang, X., Xu, Y., Zhang, L., & Zheng, G. (2022). Subsidiary Governance and Corporate Tax Planning: The Effect of Parent-Subsidiary Common Directors and Officers. *Journal of Management Accounting Research*, 34(3), 179–197. https://doi.org/10.2308/jmar-2019-510
- Yatsenko, D. (2022). Productivity effects of shared peer effort and relative performance information. Management Accounting Research, 56, 100779. https://doi.org/10.1016/j.mar.2021.100779



© 2023 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).