# Study of Published Articles on Management Accounting in Brazil and Spain \*

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#### **ABSTRACT**

In recent decades, management accounting has undergone major changes with the inclusion of new topics and research methods, dedicated journals, and especially multidisciplinary studies. These changes have been detected in articles published in leading journals. In this context, the following research question arises: what is the profile of management accounting research in Spain and Brazil? Thus, the objective of this study is to identify and analyze the topics and research methods applied in management accounting studies in Spain and Brazil; to explain how these studies are important to further developing the field of management accounting; and to compare them with studies conducted by Hesford, Lee, Van Der Stede, and Young (2007) with respect to articles published in English-language journals. We first selected seven Spanish accounting journals listed in the IN-RECS database (Índice de Impacto de Revistas Españolas de Ciencias Sociales) [Impact Factor of Spanish Social Science Journals] and found 421 articles published between 2001 and 2010. Second, we found 321 articles by selecting 29 Brazilian accounting, administration, management, finance, and business journals evaluated by Brazilian Federal Agency for the Support and Evaluation of Graduate Education (CAPES – Coordenação de Aperfeiçcoamento de Pessoal de Nivel Superior). The results show that management accounting studies have not figured prominently in the articles that were reviewed. Planning and control are among the most important subjects that emphasize performance measurement and evaluation. The existing studies are largely focused on case studies and surveys in Brazil as well as case studies and reviews in Spain.

Keywords: Management accounting. Topics. Methods and literature.

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#### 1 INTRODUCTION

Management accounting has undergone considerable changes in recent decades, with the inclusion of new research topics (Johnson & Kaplan, 1987; Cooper, 1987; Kaplan, 1983; Hiromoto, 1988; Bromwich, 1990; Dent 1990, Young & Selto, 1991; Kaplan & Norton, 1992, 1997, 2001, 2004, 2006; Shank & Govindarajan, 1993; Simons, 1995) and journals specialized in management accounting with an emphasis on multidisciplinary studies (Cooper, 1987; Covaleski, Dirsmith, & Samuel, 1986; Hopwood, 1978; Macintosh & Scapens, 1990; Kaplan & Norton, 2001).

The establishment of management accounting as an academic discipline in recent decades has led to an increase in the credibility and status of this field of knowledge (Baldvinsdottir, Mitchell, & Norreklit, 2010). This period has triggered an increase in management accounting research and in research theories (Ittner & Larcker, 2001, 2002; Zimmerman, 2001; Hopwood, 2002; Lukka & Mouritsen, 2002; Luft & Shields, 2002; Chapman, Hopwood, & Shields, 2007; Malmi & Granlund, 2009; Vaivio & Siren, 2010; Modell, 2010; Lukka, 2010; Merchant, 2010) focusing on basic precepts, central theories (e.g., economics, sociology), approaches (decision or control), and survey methods (descriptive or normative).

It is important to identify and analyze the topics that have been studied and the coherence of the applied research methods because of the limited number of dedicated journals. Such an endeavor will encourage new debates pertaining to the scientific development of management accounting.

In this context, a number of studies have analyzed the scientific output in management accounting (Lunkes, Ripoll, & Rosa, 2011, 2012; Carvalho, Saraiva, Frezatti, & Costa, 2010; Nascimento, Junqueira, & Martins, 2010; Dallabona, Nascimento, & Hein, 2010; Perdigão, Niyama, & Santana, 2010; Araujo & Silva, 2010; Hesford & Potter, 2010; Frezatti, Relvas, Nascimento, & Junqueira, 2009; Espejo, Cruz, Lourenço, Antonovz, & Almeida, 2009; Mendonca, Riccio, & Sakata, 2009; Maloni, Carter, & Carr, 2009; Alcouffe, Berland, & Levant, 2008; Beuren, Schlindwein, & Pasqual, 2007; Cardoso Pereira, & Guerreiro, 2007; Groot & García-Valderrama, 2006; Valacich, Fuller, Schneider, & Dennis, 2006; Pérez, Gallardo, & Peña, 2005; Palenzuela, Moreno, & Arroyo, 2004; Oliveira, 2002; Pérez & Gallardo, 2002; Tahai & Meyer, 1999; Engwall, 1998, White, 1996; Kirkpatrick & Locke, 1992).

Management accounting is an area of knowledge that involves assisting in the decision-making process, planning, implementing performance management systems, and providing skills related to financial reporting and control to assist managers in formulating and implementing organizational strategy (IMA, 2008).

This information can be produced in organizations at the strategic, tactical, and operational levels and is

related to different research lines, such as costs or planning and control, that are not fully consolidated, as there is a lack of consensus among researchers on the theoretical bases in this field (Zimmerman, 2001; Ittner & Larcker, 2001, 2002; Hopwood, 2002, Chapman et al., 2007; Malmi & Granlund, 2009; Vaivio & Siren, 2010; Modell, 2010; Lukka, 2010; Merchant, 2010). In this regard, it is important to examine trends in countries with respect to the different lines of research in management accounting. This article aims to identify and analyze the topics and research methods that have been applied in management accounting studies in Spain and Brazil and compare them with research that has been published in English-language journals.

The choice of studying the literature of Brazil and Spain partially results from the need to confirm or refute the claims of Hopwood (2008) and Merchant (2010), who asserted that there is no lack of focus on management accounting in terms of articles in the leading journals of European and South American countries compared with articles in leading English-language journals (Bonner, Hesford, Van Der Stede, & Young, 2006; Hesford, Lee, Van Der Stede, & Young, 2007).

The rationale for this study does not focus solely on the perception that scientific development depends on studies that are capable of producing a substantial body of knowledge; in fact, this study also focuses on the incorporation of new researchers dedicated to the analysis of and critical reflection on the scientific knowledge generated. Studies of this nature serve as diagnostic tools to research the strengthening of management accounting and to identify the structure and evolution of this field of scientific knowledge.

In this context, the following research question arises: what is the profile of the research related to management accounting in Spain and Brazil?

The aim of this study is to identify and analyze the topics and research methods that are applied in management accounting studies in Spain and Brazil. With this goal, we aim to highlight how management accounting has evolved in the two countries in recent years by focusing on the research topics and methodologies used. In this manner, we will be able to compare the results of this research with those published in English-language journals by Hesford et al. (2007). The results are intended to demonstrate how management accounting research is conducted in Brazil and Spain. We will analyze similarities and differences and describe how these studies are important for the development of the field of management accounting.

After the introduction, this article reviews the origins and concepts of management accounting. The third section highlights the methodological procedures that are used for research. The fourth section presents the results of the research, and the fifth section presents the conclusions and recommendations of the study.

#### 2 MANAGEMENT ACCOUNTING - THEORETICAL PLATFORM

Although some prior work had existed, it was only after 1950 that the field of management accounting was established as a social science (Ripoll, 1992a, 1992b; Ryan, Scapens, & Theobald, 2002; Ricardino, 2005). In general, this development resulted from the emphasis on empiricism and positivism (Zimmerman, 1979; Watts & Zimmerman, 1979), combining the growth of field and case studies in Europe (Panozzo, 1997; Drury & Tayles, 1994, 2005) and its establishment as an academic discipline (Baldvinsdottir et al., 2010).

In its early years, management accounting was strongly linked to economic theories, but its scope has expanded steadily within the social sciences as a result of the inclusion of studies in sociology, organizational psychology, mathematical analysis, and philosophy. These developments have strengthened the interdisciplinary approach of the field, expanded its scope, and resulted in academic and professional credibility (Baldvinsdottir et al., 2010).

According to Jiambalvo (2002), Garrison, Noreen, and Brewer (2007) and Horngren, Sundem, and Stratton (2004), management accounting is concerned with providing information to internal users and includes, accor-

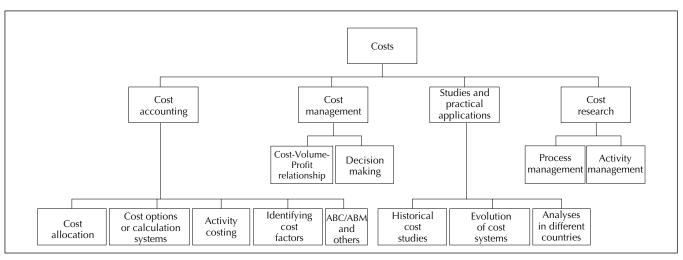
ding to Warren, Reeve, and Fess (2001), historical and forecasted data.

# 2.1 Study of Management Accounting.

Management accounting studies conducted within the scientific community allow company managers to make good management decisions. This result is evident from the works of Brown and Gardner (1985a); Brown, Gardner, and Vasarhelyi (1987); and Shields (1997). More recent evidence is found in the studies conducted by Pérez, Gallardo, and Peña (2005); Schekaiban and Ripoll (2005); Hesford et al. (2007); and Lunkes, Ripoll, and Rosa (2011).

To position the studies within the discipline, these works have been classified into three main lines of research and topics within each of these lines. The three research lines are (1) costs, (2) planning and control, and (3) other topics in management accounting.

The research line related to costs includes the following four topics: cost accounting, cost management (analyzing changes in costs), cost studies and practical applications, and cost research. Both the research lines and the topics therein are shown in Figure 1.



**Figure 1** Topics within the research line related to costs

To facilitate the classification of the studies, the research line related to planning and control is subdivided into the topics listed in Table 1.

**Table 1** Planning and control studies (Research line 2)

Topic	Studies
Budgeting	Current studies related to different budgeting processes (business, continuous, zero-based, activity, and beyond budgeting), budget cycles, development, implementation and control, and advantages and limitations
Capital budgeting	Investment decisions, methods of investment analysis (NPV, IRR, payback, rate of return, and discounted cash flow), and opportunity cost
Performance measurement and evaluation	Performance measurement systems and incentive measures, including strategic assessment tools, scorecard or Tableau de Bord, integrated scorecard or balanced scorecard (BSC), and economic value added
Organizational control	Control studies and implementation in different areas of organizations, such as the development of internal controls and work in the areas of responsibility (within organizations)
International control	Studies related to control in different countries and cultures (among organizations)

The third research line, other topics, incorporates nine topics related to cost management and research, as shown in Figure 2.

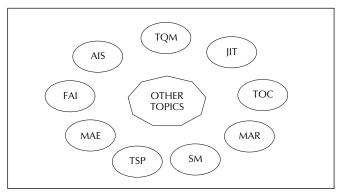


Figure 2 Other topics in management accounting

AIS (accounting information systems) is characterized by studies focused on information systems, such as ERP (enterprise resource planning). MAE (management accounting education) studies are related to the disciplines of management accounting and teaching strategies. SM (strategic management) involves research on the alignment between organizational strategy and the management of operational control systems

that enable an organization to achieve its strategy. MAR includes studies on management accounting research that incorporates work on its development and the state of the art, including analyses of research methods and theoretical approaches. Topics such as benchmarking, total quality management (TQM), just in time (JIT), the theory of constraints (TOC), and transfer and sales pricing (TSP) are easy to understand and classify. Finally, the issue of financial analysis indicators (FAI) includes the calculation and use of financial indicators in making decisions to evaluate and compare results (Lunkes, Ripoll, & Rosa, 2011).

# 2.2 Scientific Output in Management Accounting.

The scientific community has long been developing studies to understand management accounting and its empirical importance for organizations. Studies with different perspectives help to support decision making, performance measurement, costs, planning and control, and other subjects.

Lunkes, Ripoll, and Rosa (2011) reviewed the literature using international databases to identify various scientific studies on management and to understand their objectives, as presented in Table 2.

 Table 2
 Studies of scientific output in management accounting

Authors	Brief Description of the Studies
Carvalho et al., 2010	Analysis of the contributions of organizational life-cycle theories in research on management accounting. Developed a bibliometric study from the ProQuest ® database that reviewed 22 other studies.
Hesford and Potter, 2010	Analysis of accounting-related articles published in Cornell Hospitality Quarterly.
Nascimento, Junqueira, and Martins, 2010	A bibliometric and content analysis was conducted of the Congreso de la Asociación Nacional de Programas de Postgrado en Ciencias Contables (ANPCONT/Brasil) [National Association of Graduate Programs in Accounting Conference ANPCONT, Brazil], 2007 and 2008. Congresos de Contabilidad y Control de la Universidad de São Paulo [Accounting and Control Conferences at the University of São Paulo (Brazil)].
Maloni, Carter, and Carr, 2009	Study evaluating performance measurement research and the concentration of authors in journals over a period of 16 years. A total of 1,796 articles were analyzed in five publications from 1992 to 2007.
Mendonça Neto, Riccio, and Sakata, 2009	Analyze the evolution of accounting science in Brazil and the relationship between normative and positivist approaches. The Meeting of the National Association of Graduate and Research in Management, Brazil (EnANPAD) registers were analyzed between 1996 and 2005.
Alcouffe, Berland, and Levant, 2008	The study aimed to determine the construction process of networks of accounting researchers, particularly in activity-based cost accounting (ABC).
Beuren, Schlindwein, and Pasqual, 2007	The article analyzes the accounting research profile of articles published in the EnANPAD Conference and in the USP Controllership and Accounting Conference (Brazil) from 2001 to 2006.
Cardoso Pereira, and Guerreiro, 2007	A diagnostic study of the research profile focused on costs in the field of accounting and management within the EnANPAD Conference (Brazil) from 1998 to 2003. Reviews of 170 studies on the subject were initially selected, and 32 articles specifically focused on costs were then analyzed.
Groot and Garcia-Valderra- ma, 2006	This article is a bibliometric study of 169 research groups in economics, econometrics, and business management in the Netherlands. Assessments were conducted over two periods in 1995 and 2001.
Valacich et al., 2006	This study examines the proportion of articles published in top business school journals from 1994 to 2003.
Tahai and Meyer, 1999	The study analyzed 23,637 cited references of scientific articles in 1,275 articles published in 17 management journals between 1993 and 1994.
Engwall, 1998	The study examines French authors who publish in international management accounting journals as well as their geographic origin and orientation. Fifteen of the top management journals from 1981 to 1992 were analyzed.
White, 1996	The study identified 125 measures related to strategy through the analysis of management accounting topics in different journals.
Kirkpatrick and Locke, 1992	This article presents a methodology for evaluating fellowships. Three sources of information were used (articles, citations, and peer reviews), and 2,229 professors at 32 business schools in the Netherlands were evaluated

Source: Lunkes, Ripoll, and Rosa (2011).

To expand the discussion on this subject, studies on scientific output were identified in Brazil and Spain.

In Brazil, Oliveira (2002) reviewed 874 articles published between 1990 and 1999 in the following journals: Revista Brasileira de Contabilidade (RBC), Revista de Contabilidade do Conselho Regional de Contabilidade do Rio Grande do Sul (RCRC/RS), Caderno de Estudos/Fipecafi (CE), Enfoque: Reflexão Contábil (ERC), and The Contabilidade Vista & Revista (CVR) [Brazilian Journal of Accountancy (BJA), the Accountancy Journal of the Regional Accountancy Council of Rio Grande do Sul (AJRAC/ RS), the Study Notes/ Fipecafi - SN, Focus: Accounting Reflections (FAR), and Views in Accountancy and Journal (VAJ), respectively]. The articles were classified in the areas of management accounting, financial accounting, accounting theory, education, accounting research, cost accounting, professional practice, public (government) accounting, budget, public accounts, and public and international finance. During this timeframe, management accounting was the most frequently discussed topic.

A study by Dallabona, Nascimento, and Hein (2010) examined, among other aspects, the research lines that the graduate program in accounting at the Universidad Regional de Blumenau (FURB) [Regional University of Blumenau (RUB)] included between 2005 and 2009. The authors concluded that 69 of the 102 master's degree theses focused on management control research, and 33 theses focused on financial accounting.

Espejo, Cruz, Lourenço, Antonovz, and Almeida (2009) analyzed the thematic and methodological trends of articles published on accounting, organizations and society (AOS) in the Revista Contabilidade & Finanças (RCF) [Accounting & Finance Review (AFR)] and The Accounting Review (TAR) between 2003 and 2007. Their bibliometric study encompassed 538 articles and considered the following areas: i) external users, (ii) internal users, and (iii) teaching and research in accounting. The results highlighted the predominance of topics pertaining to external users, a financial accounting group. In the AOS and TAR journals, the topic of internal users presented a growing trend.

Perdigão, Niyama, and Santana (2010) examined the characteristics of the Revista de Contabilidade, Gestão e Governança [Journal of Accountancy, Managements and Governance] from 1998 to 2009. To analyze macroproblems, the study used subjects that were classified according to the model presented by Oliveira (2002) with the inclusion of corporate governance. The authors found the following main topics in the articles that were published: MA (management accounting), with 28.10%; accounting education and research, with 8.50%; and financial accounting, with 7.84%.

In previous research related to this topic, specific studies on management accounting have been found. For example, in a 2003-2008 bibliometric study, Araujo and Silva (2010) analyzed articles published on aspects of management accounting in ANPAD meeting (ENANPADs). The results suggest that Brazilian authors

tend to replicate international studies in management accounting.

Finally, Frezatti, Relvas, Nascimento, and Junqueira (2009) conducted a survey of 41 post-graduate teachers in the area of accounting to understand the perspectives of teachers on management accounting. This study found a significant convergence between the perceptions of teachers and literature but identified divergent points regarding the classification of shareholders as one of the primary users of management accounting.

To study the scientific output in management accounting, several empirical studies have been conducted in recent decades in Spain (Pérez & Gallardo, 2002; Palenzuela et al., 2004, Pérez et al., 2005).

For example, Pérez and Gallardo (2002) analyzed dedicated journals (both professional and academic), books, monographs, articles published in conference proceedings and seminars, and several working articles. The main conclusions of the study were as follows: a) a wide variety of approaches and methods are used to analyze various issues; b) there is a trend toward multidisciplinary approaches; c) there is a preponderance of positivist approaches; d) there is an increase in theoretical approaches, including sociological and even psychological issues, as well as qualitative research methods; and e) traditional issues consistently emerge as a result of the introduction of new technologies and the growing consideration of various issues, such as human factors and the environment.

The work of Palenzuela, Moreno, and Arroyo (2004) examined specific cases in the field of management accounting to sample the different possibilities that the case method, as an experimentation technique, provides to the research process. The results allow us to conclude that case studies are generally an appropriate comparative technique with which to empirically validate many of the behavioral assumptions derived from positive theories, particularly positive theories of business and accounting. Furthermore, case studies use a clear comparative method to empirically verify the propositions underpinning current developments in organizational economics, such as management and the contractual structure of companies, empowerment, and organizational architecture.

In a subsequent work, Pérez et al. (2005) conducted empirical research in the area of management accounting that was published in Spanish journals from 1988 to 2001, such as Actualidad Financiera, Partida Doble, Revista de Contabilidad, Revista Española de Financiación, and Contabilidad y Técnica Contable [Financial News, Double Entry, Journal of Accounting, Spanish Journal of Finance, and Accounting and Accounting Techniques]. The key results that were highlighted in this work include a) the small number of empirical studies published in management accounting in Spain (13.75%), b) its significant increase in relative terms since 1995, particularly from 1999 to 2001, and c) the predominance of qualitative research techniques and of companies as the unit of analysis.

### 3 RESEARCH METHODOLOGY

In this section, the methodological procedures used to construct the theoretical framework and the process of selecting and classifying the articles are presented.

# 3.1 Structured Process for Creating the Theoretical Framework.

To build the theoretical framework of this study, the Scopus and International Statistical Institute (ISI) databases were consulted, using the keywords "management accounting," "Contabilidad de Gestión," and "Contabilidade Gerencial" in English, Spanish, and Portuguese, respectively. In the first search, 6969 articles were found. After the establishment of the appropriate filters, 412 articles were obtained from the ISI database, and 472 were obtained from the Scopus database.

From this initial sample, abstracts were analyzed to select management accounting-related articles from the scientific literature. This analysis identified five articles in the Scopus database and nine articles in the ISI database to form the theoretical basis of this research. The Scopus and ISI databases were chosen for their breadth and relevance. In the ISI database, there are more than 16,000 journals, books, and international events in the sciences, social sciences, arts, and humanities, and Scopus contains more than 14,000 such materials (Testa, 1998; Tasca, Ensslin, Ensslin, & Alves, 2010; Rosa, Ensslin, Ensslin, & Lunkes, 2011; Mesquita et al., 2006, ISI, 2012; Scopus, 2012).

Research was also conducted to explore scientific output in management accounting in Spanish accounting journals (Table 3) and accounting, management, administration, business, and finance in Brazil (Tables 4, 5, and 6) from 2001 to 2010.

### 3.2 Procedure for the Article Selection.

This article aimed to identify and analyze articles published in journals in Spain and Brazil. Thus, the following criteria were considered: (i) the study focuses on management accounting, and (ii) for the selection of journals in Spain, the term "accounting" or "accountant" and its inclusion in the IN-RECS [Index database (Impact Factor of Spanish Social Science Journals), which was developed by the University of Granada, was used to select journals of cumulative impact. IN-RECS was chosen because of its widespread use in Spain and because of the inability to use another database, as Spain has only one journal with an impact factor in accounting (e.g., in the ISI or JCR). The Revista Española de Financiación y Contabilidad [Spanish Journal of Finance and Accounting] is the only journal that is currently indexed in the JCR.

In Brazil, we have considered both the English terms "accounting" and "accountancy," "administration," "management," "finance," and "business" as well as their translations in Portuguese, as journals should be included in the "Qualis" CAPES database (Coordination of Higher Education Improvement). The journals were selected from the following categories: A1, A2, B1, B2, and B3, the leading categories; these categories are frequently used to evaluate graduate programs. The "accounting" area of knowledge has no A1 or A2 journals, and there are no journals indexed by the ISI and JCR.

In both cases, articles have been selected from a 10-year period (2001-2010).

In the Spanish language, seven journals have been selected as shown in Table 3. Of these journals, the Revista Iberoamericana de Contabilidad de Gestión (RICG) [Ibero-American Journal of Management Accounting (IAJMA)] is the only publication that is dedicated to management accounting. In this case, all of the articles in the journal were sampled. We selected 421 articles related to management accounting. This selection was conducted by reading each abstract and analyzing the entire article. Articles related to research notes, interviews, book reviews, theses, and publishing houses were not included.

 Table 3
 Results of Spanish journals selected

Journals	Total Articles (2001-2010)	Selected Articles (2001-2010)
Revista Española de Financiación y Contabilidad (REFC)	332	40 (12%)
Revista de Contabilidad (RC)	117	15 (13%)
Revista de Contabilidad y Tributación (RCT)	764	18 (2.5%)
Partida Doble Revista de Contabilidad, Auditoría y Empresa (RCAE)	921	89 (9.5%)
Técnica Contable (RTC)	612	44 (7%)
Revista Iberoamericana de Contabilidad de Gestión (RICG)	125*	125 (100%)
Harvard-Deusto Finanzas & Contabilidad (RHDFC)	449**	90 (20%)
	3,320	421 (12%)

<sup>\*</sup> Available from 2003. \*\* Publication of an edition of the journal in 2001. Source: Lunkes, Ripoll, and Rosa (2011).

The results show that approximately 12% of the articles published during the period under review are related to management accounting. However, if RICG is excluded from the sample because it is dedicated to

management accounting, then this percentage decreases to approximately 9%.

With regard to accounting, seven Brazilian journals were selected, as shown in Table 4. The sample com-

prises 282 articles. The results show that among all of the accounting-related articles, 30% are articles on management accounting, which is higher than the 12%

of Spanish journals and the 28% of English-language journals.

 Table 4
 Results of selected Brazilian accounting journals

Journals	CAPES Category	Total Articles (2001-2010)	Selected Articles (2001-2010)
Revista de Contabilidade & Finanças (RCF)	B1	215	63 (29%)
Revista de Contabilidade Vista & Revista (RCVR)	В3.	210	80 (38%)
Revista Universo Contábil (RUC)	В3	164**	53 (32%)
Revista Contemporânea de Contabilidade (RCC)	В3	85*	40 (47%)
Revista de Contabilidade e Organizações (RCO)	В3	73***	19 (26%)
Revista de Educação e Pesquisa em Contabilidade (REPEC)	В3	60***	10 (17%)
Revista de Administração e Contabilidade da Unisinos – Base	B2	138*	17 (12%)
Total	-	945	282 (30%)

<sup>\*</sup> Available from 2004, \*\* 2005, and \*\*\* 2007.

Source: Compiled from Lunkes, Ripoll, and Rosa (2011).

Table 5 presents the management-related journals. We selected 16 articles (1%) related to management accounting.

 Table 5
 Results of selected Brazilian management journals

Journals	CAPES Weighting	Total Articles (2001-2010)	Selected Articles (2001-2010)		
Comportamento Organizacional e Gestão <sup>1</sup>	B1	41	0 (0%)		
Economia Global e Gestão <sup>2</sup>	B1	75	2 (2.5%)		
Gestão & Planejamento	В3.	135	2 (1.5%)		
Gestão & Produção	A2	384	3 (1%)		
Gestão.Org <sup>3</sup>	В3.	179	0 (0%)		
REGE: Revista de Gestão USP <sup>4</sup>	В3	189	5 (2.5%)		
Revista de Gestão da Tecnologia e Sistemas de Informação <sup>5</sup>	B2	137	4 (3%)		
Revista Portuguesa e Brasileira de Gestão <sup>2</sup>	B1	86	0 (0%)		
RGSA: Revista de Gestão Social e Ambiental <sup>2</sup>	В3	101	0 (0%)		
Total		1,327	16 (1)%		

<sup>&</sup>lt;sup>1</sup>Available from 2006 to 2008. <sup>2</sup>Available from 2007. <sup>3</sup>Available from 2003. <sup>4</sup>Available from 2005. <sup>5</sup>Available from 2004.

Table 6 presents the finance, business, and management journals, which included 23 articles (1.5%) on management accounting.

 Table 6
 Results of selected finance, business, and management journals

Journals	CAPES Weighting	Total Articles (2001-2010)	Selected Articles (2001-2010)
Revista Brasileira de Finanças	B1	150	0 (0%)
Revista Brasileira de Gestão de Negócios (Online)*	В3.	145	6 (4%)
Revista de Negócios (Online)	В3	231	3 (1.5%)
BBR: Brazilian Business Review (Edição em português. Online)*	B2	105	1 (1%)
Subtotal		631	10 (1.5%)
Faces: Revista de Administração (Belo Horizonte. Impresso)	В3	158	2 (1.5%)
RAC. Revista de Administração Contemporânea (Impresso)	B1	417	2 (0.5%)
RAI: Revista de Administração e Inovação	В3	157	0 (0%)
RAM. Revista de Administração Mackenzie (Impresso)	B1	267	4 (1.5%)
REAd. Revista Eletrônica de Administração (Porto Alegre. Online)	B2	421	2 (0.5%)
Revista de Administração (FEA-USP)	B2	303	2 (0.5%)
Revista de Administração Pública (Impresso)	A2	223	0 (0%)

continuous

continued

Journals	CAPES Weighting Total Articles (2001-2010)		Selected Articles (2001-2010)	
Revista de Ciências da Administração (CAD/UFSC)	В3	235	0 (0%)	
BAR. Brazilian Administration Review	A2	141	1 (0.5%)	
Subtotal		1,226	13 (1%)	
Total		1,857	23 (1.5%)	

<sup>\*</sup> Available from 2004.

In the period from 2001 to 2010, there is a difference in the articles published between the two countries, as shown in Figure 3. In Spain, there is a slight downward trend ( $R^2$ 

= 0.118), whereas in Brazil, there is a strong growth trend ( $R^2 = 0.599$ ).

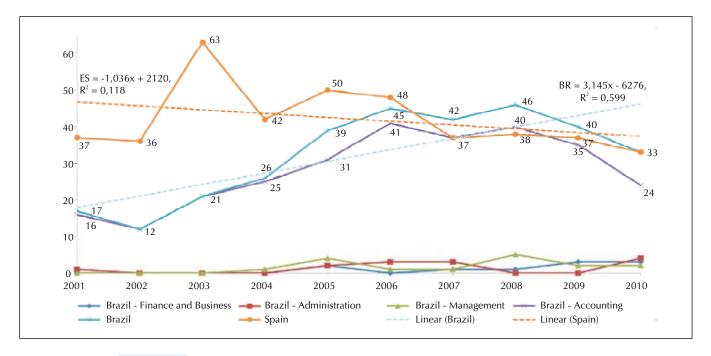


Figure 3 Number of articles on management accounting published in Spain and Brazil

In Spain, there has been an increase in management accounting-related articles, including the creation of the dedicated journal RICG, as shown in Figure 3. The best year was 2003, with 63 articles, when RICG was launched; a reduction is observed subsequently.

Because of the emergence of RICG, in which 20 articles were published, 2003 was the period of the greatest increase in management accounting-related articles. The annual average is approximately 42 articles. This result contrasts with figures for other countries; for example, in Englishlanguage journals, there was an increase in absolute numbers but a relative decrease (Hesford et al., 2007), whereas in Spain, publications related to management accounting have declined in recent years in both relative and absolute terms.

In Brazil, the area of accounting, administration, management, finance, and general business is growing, with new journals that have emerged since the beginning of the analyzed period. At the beginning of the period, there was only one accounting journal. This trend confirms the results of Espejo et al. (2009) regarding the overall growth trend.

In Figure 3, we observe that the number of publications has grown rapidly in the initial period with a decrease in

the last two years in absolute terms and a decrease in relative terms over the past four years. The average of 32 publications per year is still low compared with Spain (42 articles per year in seven journals).

These results can be compared with the study by Hesford et al. (2007) in 10 English-language accounting journals included in the Social Science Citation Index (SSCI). This study analyzed 916 articles over a 20-year period (1981-1990) and (1991-2000).

# 3.3 Topic and Research Method Classification Procedures.

To organize the articles by topic, the works of Brown and Gardner (1985), Brown et al. (1987), Shields (1997), Pérez et al. (2005), Schekaiban and Ripoll (2005), Hesford et al. (2007), and Lunkes, Ripoll, and Rosa (2011, 2012) were used as references, as indicated in Section 2.1.

The article classification research methods of the works of Birnberg, Shields, and Young (1990), Hesford et al. (2007), and Lunkes et al. (2011) were used to divide the methods into nine categories, which described in Table 7, as adapted by Birnberg, Shields, and Young (1990).

 Table 7
 Classification and definition of research methods

Methods	Definition
Analytical	This method involves an assessment and detailed study of the available information in an attempt to explain the context of a phenomenon.
Archival	This method involves the use of information that has not been scientific reviewed, such as memories, stories, accounting examples, and other business documents.
Case	This method involves research on phenomena, including people, processes and structures, a system, a unit, a process, or an organization.
Experiment	This method involves processing information in an attempt to establish the cause and effect of the researched variables.
Field	This method involves research on phenomena, including people, procedures, and structures of two or more organizations.
Framework	This method involves the development of a new concept or new perspectives.
Review	This method essentially involves the synthesis and review of existing literature.
Survey	This research method involves a group of people and is often conducted through a questionnaire.
Other	Not included in any of the other methods.

Source: Adapted from Birnberg, Shields, and Young (1990).

The articles were also subjected to quantitative analysis to evaluate the productivity of the authors who adopt each of the approaches in question and to determine the degree of concentration of output. In this analysis, we chose Lotka's Law. Lotka (1926) established the basis of the inverse square law, which indicates that the number of authors contributing to a particular scientific field is approximately  $1/n^2$  of those making

a contribution (Alvarado, 2002). In 1976, Lotka's Law showed that one-third of the field literature was produced by fewer than one-tenth of the authors, resulting in an average of 3.5 articles per author. Meanwhile, 60% of the authors had published only a single article (Araújo, 2006).

To classify the articles of the sample, the topics and research methods applied were identified.

#### 4 RESEARCH RESULTS

To understand how Brazilian and Spanish authors conduct research in management accounting, the analyzed articles have been classified by topic and research methods, as described in the research methodology.

## 4.1 Article Classification by Topic.

The topics that have been researched in Brazil and Spain are diverse and differ between countries. In Spain, the articles are focused on i) other issues of management accounting, ii) planning and control, and iii) costs (in this order). In Brazil, the predominant topic was planning and control, followed by other issues and costs, as shown in Table 8.

 Table 8
 Results for topic classification

	English-Lan-	English-			BRAZIL (2	2001-2010)		
Topics	guage Journals * (1981-1990)	Language Journals (1991-2000)	SPAIN** (2001-2010)	Accounting	Administra- tion	Finance and Business	Management	Total Brazil
Costs								
Cost Accounting	36 (11.3%)	104 (17.5%)	43 (10.5%)	26 (9%)	0	0	1 (6.25%)	27 (8.5%)
Cost Management	14 (4.4%)	7 (1.2%)	7 (1.5%)	37 (13%)	2 (15.5%)	0	1 (6.25%)	40 (12.5%)
Cost studies and practices	4 (1.3%)	11 (0.2%)	27 (6.5%)	5 (2%)	0	1 (10%)	1 (6.25%)	7 (2%)
Strategic cost management	N/A	N/A	14 (3.5%)	N/A	0	0	0	0
Multiple	0.0	1 (0.2%)	17 (4%)	N/A	0	0	0	0
Subtotal	54 (16.9%)	123 (20.6%)	108 (26%)	68 (24%)	2 (15.5%)	1 (10%)	3 (18.75%)	74 (23%)
Planning and control								
Budgeting	64 (20%)	70 (11.7%)	34 (8%)	7 (2.5%)	0	1 (10%)	2 (12.5%)	10 (3%)
Capital budgeting	14 (4.4%)	33 (5.5%)	5 (1%)	29 (10.5%)	0	0	0	29 (9%)
Performance measurement and evaluation	35 (10.9%)	113 (19%)	55 (13%)	35 (12%)	1 (7.5%)	1 (10%)	1 (6.25%)	38 (12%)
Organizational control	119 (37.2%)	177 (29.7%)	21 (5%)	45 (16%)	0	1 (10%)	0	46 (14.5%)
International control	4 (1.3%)	12 (2%)	3 (1%)	14 (5%)	0	1 (10%)	1 (6.25%)	16 (5%)
Multiple	1 (0.3%)	2 (0.3%)	9 (2%)	2 (1%)	0	0	0	2 (0.5%)
Subtotal	237 (74.1%)	407 (68.3%)	127 (30%)	132 (46%)	1 (7.5%)	4 (40%)	4 (25%)	141 (44%)
Other								
AIS	4 (1.3%)	3 (0.5%)	26 (6%)	23 (8%)	3 (23%)	2 (20%)	2 (12.5%)	30 (9.5%)
Benchmarking	0.0	2 (0.3%)	4 (1%)	1 (0.5%)	0	0	0	1 (0.5%)
TQM	0.0	9 (1.5%)	25 (6%)	3 (1%)	0	0	0	3 (1%)

continuous

continued

	English-Lan-	English-		BRAZIL (2001-2010)				
Topics	guage Journals * (1981-1990)	Language   SPAIN**   (2001-2010)   (1991-2000)		Accounting	Administra- tion	Finance and Business	Management	Total Brazil
JIT and TOC	0.0	7 (1.2%)	2 (0.5%)	9 (3%)	1 (7.75%)	0	0	10 (3%)
Education management	6 (1.9%)	14 (2.4%)	4 (1%)	25 (9%)	0	0	0	25 (7%)
Strategic management	7 (2.2%)	8 (1.3%)	12 (3%)	19 (6.5%)	0	0	0	19 (6%)
TSP	9 (2.8%)	22 (3.7%)	17 (4%)	2 (1%)	0	0	1 (6.25%)	3 (1%)
MA studies	N/A	N/A	28 (6.5%)	N/A	5 (38.5%)	1 (10%)	0	6 (2%)
Financial analysis	N/A	N/A	31 (7.5%)	N/A	0	1 (10%)	2 (12.5%)	3 (1%)
Multiple	3 (0.9%)	1 (0.2%)	37 (8.5%)	0.0	1 (7.75%)	1 (10%)	4 (25%)	6 (2%)
Subtotal	29 (9.1%)	66 (11.1%)	186 (44%)	82 (29%)	10 (77%)	5 (50%)	9 (56.25%)	106 (33%)
Total	320 (100%)	596 (100%)	421 (100%)	282 (100%)	13 (100%)	10 (100%)	16 (100%)	321 (100%)

<sup>\*</sup> Directed by Hesford et al. (2007) in English-language accounting journals (ELJ). N/A: Not applicable.

Examining the data emerging from English-language journals, we observe that the research line related to planning and control is the most frequently discussed, followed by cost and other issues of management accounting (Hesford et al., 2007). The research of Spain and Brazil typically focuses on peripheral issues.

In Spain, among the three major lines of research that incorporate the various topics covered in this article, the most important topics are performance measurement and evaluation (within planning and control) and cost accounting (in the research line related to costs). This result is consistent with the findings of Pérez and Gallardo (2002), who showed that this research focuses on traditional topics related to costs, scorecards, and budget.

The publication of articles discussing measurement and performance evaluation has shown a slight decline over the last ten years, with eight articles in 2004, the year with the highest number of published articles.

Within the research line relate to planning and control and the topic of performance measurement and evaluation, the results show that 65.5% of articles have focused on the BSC, 25% on performance measures (PM), 6% on Scorecard, and the remaining 3.5% on incentive systems (IS).

Among the studies under analysis, 47% are review studies, and 27% are case studies. Among the features of the articles, it should be noted that of the 36% of the articles cited in journals, 40% had a single author, and 92% published a single article; there was an average of 24 references per article; and Kaplan and Norton were the most referenced authors.

Articles discussing the topic of costs have remained constant in Spain at approximately 11 articles a year. Of these articles, 31% addressed activity-based costing, 22% were cited in journals, 48% have a single author, nine authors published 30% of the articles, each article contains an average of 15 references, and Kaplan and Cooper are the most cited authors. In particular, within the research line related to costs, 71.5% of the articles were based on case studies. The results show that these studies were not continuous but were stagnant, as they were conducted on a specific company. In some cases, the results are based on consultants who are not overly concerned with methodo-

logical issues. The results also show that current problems, such as strategic cost management, are not typically the focus of this research and that the main concerns remains with traditional topics, such as the implementation of enterprise-wide cost systems. These data indicate that there are opportunities for further expansion of studies related to strategic cost management, especially with the application of study methods and field work.

Research topics in Spain confirm the work of Boer (2000) and Tan, Fowler, and Hawkes (2004), who showed that the important issues addressed by researchers and practitioners were activity-base costing and activity-based management (ABC/ABM), performance evaluation, product cost calculations, and budgeting.

In the case of Brazil, accounting journals frequently tend to publish articles on cost management issues (13%) and organizational control (16%). Meanwhile, in business administration journals, 39% of the published articles are focused on other emerging issues in management accounting. The journals of finance, business, and management have published a considerable number of articles on accounting information systems or management. Among the most important research topics in Brazilian and English-language journals are performance measurement and evaluation and cost management. Through observation of the evolution of performance measurement and evaluation by analyzing articles in English-language publications during the period between 1981 and 2000, the importance of this concept in the literature and in organizational practice is clear and is largely embodied in the development of the scorecard.

Among the least discussed topics in Spain were JIT, TOC, capital budgeting, organizational control, and management in education. Meanwhile, in Brazil, the least frequently published topics were strategic cost management, TQM, TSP, and benchmarking.

A comparison of the results indicates that in Spain, the highest incidence of publications occurs within the lines of research in cost and cost accounting. Meanwhile, in the case of Brazil, the issue of primary concern is that of cost management. This result may be observed

<sup>\*\*</sup> Directed by Lunkes, Ripoll, and Rosa (2011) in accounting journals in Spain.

partially because companies in Spain, as a result of the financial crisis, are attempting to implement cost systems to better understand company costs. Sectors such as ports or universities have cost models. In general, such studies present new perspectives and incorporate new developments and innovations, with a profusion of works centered on thorough cost analysis using ABC, which facilitates publication in journals. In the case of Brazil, cost management studies highlight the dedication of researchers to broadly ranging areas surrounding the incorporation of new management tools by Brazilian companies to improve competitiveness.

In Spain, the topic of budgeting is prominent within the research line related to planning and control. Thus, to improve budget processes, many companies have implemented new European models, such as beyond budgeting, in addition to new practices of public budgeting introduced in state-operated entities, such as ports and universities or other government agencies, to improve management and reduce costs. In many cases, these organizations have observed the need to reduce costs and have thus implemented tools to measure and evaluate performance and improve the budgetary process.

Similarly, in Brazil, we can highlight topics related to capital budgeting and organizational control. The prominence of the first topic results from the highrisk investments conducted in the country. Many studies are focused on aspects related to the evaluation of minimum yield and risk, and there are several studies on capital budgeting evaluation techniques. The issue of organizational control is increasingly researched in articles on internal control derived primarily from studies on public entities.

Overall, the results show that management accounting is well established in Spain. Meanwhile, Brazil presents significant growth (both in journals and researchers) because of an emerging organized network that is likely to result in an increasing number of researchers in this field in future years (Lunkes et al., 2012).

The study of Lunkes, Ripoll, and Rosa (2012) showed that Spain has three major management accounting networks. In one network, there are 18 researchers participating from different countries, such as Brazil, Cuba, Venezuela, and Mexico, and the other two networks have five links. In Brazil, there is a greater number of networks (18), but the number of researchers in each network is smaller, and there is a low level of interaction with other countries.

It is also observed that there are still difficulties in obtaining a satisfactory number of responses to surveys for management accounting research (Beuren & Santos, 2012).

An important step in the consolidation of the field of management accounting is to develop a core of key topics based on theories that are accepted in academic circles (Hopwood, 2007, 2008; Modell, 2010; Vaivio & Siren, 2010; Merchant, 2010; Baldvinsdottir et al., 2010). Another critical step that would also contribute to the promotion and improvement of the quality of work in descriptive and normative aspects would be the consolidation of methodology that is applied in management accounting research (Zimmerman, 2001; Ittner & Larcker, 2001 2002; Baldvinsdottir et al., 2010).

#### 4.2 Research Methods.

A study of the research methods that are used is important to understanding the type of research conducted. Table 9 shows that the literature review and case study methods are the most prevalent in Spain. In Brazil, the focus is on case studies and surveys. Comparing the research in Spain and Brazil with that in English-language journals, in which theoretical framework and analytical methods are highlighted, we realized that research methods differ among countries. For example, in Spain, researchers are more focused on descriptive studies.

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Scientific	English-Lan-	English- Lan-	€ <b>:</b> **					
Research Methods	guage Journals * (1981-1990)	guage Journals (1991-2000)	Spain** (2001-2010)	Accounting	Administra- tion	Finance and Business	Management	Total Brazil
Analytical	62 (19.4%)	107 (18%)	33 (8%)	11 (4%)	0	0	2 (12.5%)	13 (4%)
Archival	10 (3.1%)	68 (11.4%)	7 (2%)	11 (4%)	1 (7.75%)	1 (10%)	3 (18.75%)	16 (5%)
Case	16 (5%)	62 (10.4%)	120 (28.5%)	67 (23.5%)	1 (7.75%)	3 (30%)	4 (25%)	75 (24%)
Experiment	50 (15.6%)	66 (11.1%)	4 (1%)	10 (3.5%)	1 (7.75%)	0	1 (6.25%)	12 (3.5%)
Field	23 (7.2%)	68 (11.4%)	58 (13.5%)	17 (6%)	0	0	1 (6.25%)	18 (5.5%)
Framework	77 (24.1%)	102 (17.1%)	9 (2%)	74 (26.5%)	0	0	0	74 (23%)
Review	24 (7.5%)	25 (4.2%)	137 (32.5%)	49 (17.5%)	2 (15.25%)	0	2 (12.5%)	53 (16.5%)
Survey	55 (17.2%)	94 (15.8%)	52 (12%)	38 (13.5%)	8 (61.5%)	6 (60%)	3 (18.75%)	55 (17%)
Other	3 (0.9%)	4 (0.6%)	1 (0.5%)	5 (1.5%)	0	0	0	5 (1.5%)
Total	320 (100%)	596 (100%)	421 (100%)	282 (100%)	13 (100%)	10 (100%)	16 (100%)	321 (100%)

<sup>\*</sup> Directed by Hesford et al. (2007) in English-language accounting journals (ELJ).

In English-language journals, studies offer new methodological approaches, whereas in Spain, there is still a tendency to discuss well-established topics and apply them to practice. This observation corroborates the findings of Pérez and Gallardo (2002) regarding the preference for theoretical work (review) combined with the application of case studies (Palenzuela et al., 2004, Pérez et al., 2005).

Among the least common research methods in management accounting in Spain are studies applying experiment and archival methods. In Brazil, experiment and analytical research are underutilized (3.5% and 4%, respectively).

These results partly coincide with those reported by Nascimento, Junqueira, and Martins (2010), who argued that research strategies in management accounting in the case of Brazil are based on field research (38%), descriptive studies (16%), and documentaries (9%) but do not generate substantive theories and explanatory studies. Studies that employ questionnaires to collect data (surveys), primarily those in management accounting, constitute more than half of the articles in management, finance, and business journals, and case studies are slightly more predominant in management journals.

The results show that there is great potential for research in field studies in Brazil and Spain within a conceptual framework. As presented by Palenzuela et al. (2004), these studies are important to empirically validate many hypotheses but are not widely used in the research in these two countries

Although field studies have resulted in a large number of review studies in Spain, these studies have tended to gradually lose ground, partly because Spanish researchers attempt to conform to the characteristics of international research. At the university level, the most important requirement for assessing professors' research is the publication of articles in journals indexed by the JCR. We noted that researchers in Brazil are showing signs of heading in the same direction as their Spanish counterparts, in other words, the important is publish in journals indexed.

#### 4.3 Quantitative Analysis.

Table 10 compares the parameters of Lotka's Law, research data by Hesford et al. (2007), and the results of this research, in which we observed that the parameters (results) were not significantly different from international research; that is, Lotka's Law does not apply to national and international studies in the field of management accounting. One can also compare the productivity of international elites with that of Brazil using the average number of articles per elite author.

 Table 10
 Lotka's Law X MA International X MA Spain and MA Brazil

Parameters	Lotka's Law	ELJ (1981 A 2000)	Spain (2001 A 2010)	BRAZIL (2001 to 2010)			
				Accounting	Administration	Finance and Business	Management
Articles by 1/10 of authors	33.33%	58.70%	43%	30.81%	61.5%	40%	40%
Number of articles per author	3.5	1.02	0.57	0.59	0.33	0.45	0.41
Authors with only one published article	60.00%	67.00%	85.8%	80.91%	61.5%	96%	51%
Publication by the elites in the field	50.00%	31.44%	15.2%	19.40%	38.5%	4%	49%

These results corroborate those obtained by Mendonça Neto, Riccio, and Sakata (2009), as the productivity of authors in accounting is less than that observed by Lotka, indicating that research and knowledge in accounting is less concentrated than that predicted by the law of bibliometrics.

The percentage of single-author articles is 10% for administration, management, finance, and business journals and 8% for accounting journals. With regard to the number of authors per article in Spain, 46% of articles have only one author, 36% have two authors, 15% have three authors, and only 3% have four authors. In comparison, these results are greater than the 21.9% in cost-related articles found by Cardoso, Pereira, and Guerreiro (2007). In this study, 53.1% of the articles correspond to the work of two authors.

With respect to elitism, three authors excel in accounting journals in Brazil: Ilse Maria Beuren (16 articles), Antônio Artur de Souza (12 articles), and Marcos Antônio de Souza (11 articles). In other Brazilian journals, there is a strong presence of other authors, such

as Fabio Frezatti (nine articles). In Spain, two authors are prominent in this regard: Vincent Ripoll at the University of Valencia and Oriol Amat at Pompeu Fabra University.

## 4.4 Contributions of the Study.

The analysis of published articles provides a global perspective on research in management accounting. This study contributes to the identification of opportunities and highlights the potential of the management accounting discipline in Brazil and Spain. Based on the findings, we recommend devoting more attention to the proper application of concepts and techniques of management accounting and placing greater emphasis on unexplored topics and research methods compared with international studies.

Although there is a growing trend in the importance of management accounting in both countries, as demonstrated during the study period, this trend should clearly prompt the emergence of more research (congress) on this subject, provide more opportunities to create dedicated journals and develop management accounting databases, and provide incentives for publications in leading journals.

This study provides a comprehensive overview of management accounting research in Spain and Brazil and shows that there is an alignment between theory (Jiambalvo, 2002, Garrison, Noreen, & Brewer, 2007; Horngren, Sundem, & Stratton, 2004; IMA, 2008) and research. The conceptual basis of this study indicates that management accounting aids the decision-making process as well as budgeting and management systems, whereas the results of the current study show that among the topics considered, performance measurement and evaluation, cost management, and information systems are noteworthy.

We believe that this work contributes to management accounting research by revealing topics and specific research methods, especially those found in the literature, that can influence various management accounting and control system practices. The results provide new opportunities for researchers to study management accounting; to link topics such as strategic cost management and research methods; and to deepening our knowledge through experimental, analytical, and field studies.

By analyzing the two schools, one that is framed in a European context and the other in a South American context, we observed similarities between the theoretical platform and methodological strategies. The differences are primarily centered on methodological aspects. Spanish studies generally present fewer methodological frameworks than Brazilian articles do. The study also shows that there is a quality difference among journals in Spain. Some journals have the features of technical publications, whereas others, such as the Revista Española de Financiación y Contabilidad [Spanish Journal of Finance and Accounting], are indexed by JCR.

In summary, the current study indicates that research in Spain explores critical management tools, such as cost systems, budgeting, and BSC topics, possibly as a result of organizational practices. In contrast, Brazilian studies are more specific and relate to issues that include cost management, capital budgeting, and organizational control, especially internal control. This focus has both direct and indirect consequences on organizational management.

### 4.5 Limitations of the Study.

Several aspects of this study could constitute a limitation in the research conducted and could modify the results. The first limitation may be the use of keywords to select published articles. It is possible that an article may not use the selected keywords and would thus not be considered. Moreover, we chose only indexed journals; therefore, the databases used, ISI and Scopus, could constitute another limitation, given that we may have omitted works that have been published in journals that were not considered in this study.

The current study has been compared to the work of Hesford et al. (2007). We should note that the timeframes of these studies are not equal, as the study by Hesford et al. (2007) considering English-language journals was conducted during the period between 1981 and 2000, and this study covers the period 2001-2010; therefore, there may have been changes in the profile of the topics and research methods that were used.

### 5 CONCLUSIONS AND RECOMMENDATIONS

This research aimed to identify and analyze the topics and research methods that have been applied in management accounting studies in Spain and Brazil, to discuss how these studies are important to the development of the field of management accounting, and to compare these works with the study of Englishlanguage journals by Hesford et al. (2007). To achieve this objective, we analyzed 421 journal publications in Spain and 321 articles in Brazil related to management accounting, and we classified them according to lines of research (e.g., cost or planning and control) and research methodologies.

The results show that management accounting does not occupy a prominent place in Spanish and Brazilian journals. However, this research identified opportunities for improvement in the area of education, in the lack of specialized centers in the field of management accounting, and in the incorporation of established networks of authors from different countries.

Possible causes for the issues mentioned above include (i) the lack of a database or difficulty in obtaining data or (ii) the limited number of journals dedicated to management accounting (Pérez et al., 2005; Ittner & Larker, 2001) and the lack of researcher creativity (Zimmerman, 2001).

For Lunkes et al. (2011), consolidation in the field of management accounting should occur based on a number of measures that should be considered by Brazilian and Spanish researchers.

In addition, the results that are discussed in this work could assist researchers in understanding that management accounting in Brazil and Spain has a strong tendency to focus on peripheral issues (which we have included in the "other" research category), compared with research lines on cost and planning and control, which are often conducted through case studies and reviews of research methods.

In English-speaking countries, few management accounting (cost management and strategic control) journals apply the experimental and analytical research methods of Hesford et al. (2007). These journals have a narrow focus and thus provide substantial opportunities for universities in Europe and other parts of the world, such as South America (Merchant, 2010; Atkinson et al., 1997; Hesford et al., 2007; Scapens, 2004; Shields, 1997).

On many occasions, we observed that the articles in management accounting that were reviewed made use of locally published books and articles. This finding corroborates the results of Araujo and Silva (2010), who reported that MA researchers in Brazil use unorthodox measures to conduct their work. This aspect of management accounting is more troubling in Brazil than in Spain. In both cases, is necessary to pursue opportunities aimed at incorporating more international articles in research. This lack of connection with academia hinders the inclusion of Brazilian research in other international centers because international advancements are not included in the discussion of issues affecting organizations and institutions in Brazil (Nascimento et al., 2010).

The growth and dominance of empirical studies in Brazil is noteworthy and is a positive indicator of the evolution of this type of research method, according to Cardoso et al.

(2007), as the results of these studies are not based solely on literature reviews.

This work contributes to our understanding of the role of accounting in business decisions, as demonstrated by the analysis of the Brazilian and Spanish articles; thus, there is a need for greater sophistication in the analysis of investment options and decision-making processes.

By analyzing the content of Brazilian and Spanish articles, this study found that the "capital budget" practices with significant deployment in large companies in Brazil appears to have received relatively little attention in the literature of other countries in recent times.

A recommendation to extend the scope of this work would include studies on the topics, research methods, authors, and citations in other journals included in databases such as SciELO, EBSCO, Science Direct, Dialnet, and Latindex.

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