

Critical analysis of management accounting in Brazil from the viewpoint of stricto sensu postgraduate professors of the area

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ABSTRACT: This work presents a critical analysis of management accounting in Brazil, from the perception of professors from the management area of stricto-sensu postgraduate programs in accounting. The central goal was to identify the view of these professors on management accounting. The research, which is of the empirical-analytical and descriptive type, concentrated on identifying and analyzing the following elements: (i) profile of faculty members; (ii) differentiation between financial and management accounting; (iii) priorities of management accounting; and (iv) significance of the themes treated by management accounting. The empirical-methodological analysis was used through a survey, conducted with the application of semi-open questionnaire with the faculty members indicated by the coordinators of Postgraduate programs. As a conclusion, a significant convergence was found between the perception of the faculty members and the literature, especially in connection with the user, focus of analysis and regulating bodies, however, a few points were reasonably out of tune (other users, principles and significant themes).

Keywords: Management accounting, teaching of management accounting, differences between management and corporate accounting.

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1. INTRODUÇÃO

The development of management accounting dates back a long time, focusing on the internal aspects of organizations. Hesford *et al.* (2007) mention that, from 1980, new research topics arose as well as new international periodicals with space for management accounting. These periodicals present a different perspective on the examination of phenomena, with multidisciplinary concern and, in many cases, with a multiplicity of methods applied in the analysis of problems.

Consequently, it is important to know if there is consensus, and on which element, in connection with the treatment given to management accounting in classrooms. Common sense indicates that discrepancies must occur in function of different formations, experiences and views, in terms of utility and the structure of management accounting, by professors. Thus, differently from financial accounting, which may be normative, it can be understood in an encompassing and uniform way, the degree of homogenization of the application of management accounting in the classroom does not seem to be a fact.

The motivation in developing this analysis is related to the vastness of the country, both geographical and cultural, which permits to find different types of utility and application to management accounting, such as, for example: (i) in more globalized entities; (ii) in more professionalized entities; (iii) in entities with a family management model; (iv) diversified companies, etc. The great variety of organizations that exist in Brazil permits first to understand and apply management accounting from a pluralist perspective, capable of meeting the needs of different users.

This diversity can be observed also in the faculty members who transmit their knowledge to students who, in turn, are or will be managers of organizations. The perception of the faculty members on management reliability has a significant impact on students and, consequently, on the development of organizations. Given this context, the questions that guides this research is: what is the perception of *stricto sensu* postgraduate professors in accounting sciences on management accounting in Brazil?

The justification for the choice of these professors results from the finding that the pole of formation and dissemination of knowledge of the area is in postgraduate programs, because these form the faculty members and researchers of the different regions of Brazil.

The article was structured in six parts, including the introduction and the conclusion. The second part corresponds to the theoretical referential on management accounting, to situate the theme. The differences among financial and management accounting are presented in the third part. The breakdown of the design of the field research appears in the fourth part. In the fifth part are analyses of the data and conclusions.

2. CHARACTERIZATION OF MANAGEMENT ACCOUNTING

Management accounting constitutes a part of the accounting system devoted to information to internal users of the entity (Hansen and Mowen, 1997). According to Louderback *et al.* (2000), management accounting tries, at the same time, to be comprehensive and concise, constantly adjusting itself to adapt to the technological changes, to the needs of managers and to the new approaches of the other functional business areas. To said authors, the two forms of accounting, financial and management, have in common the treatment of economic events, the need for measurement of economic activities and the

difficulties in obtaining such information. However, differently from the financial, management accounting, because it is not normative, can be understood in several ways, depending on the view of the author. Frezatti *et al.* (2007) presented different perceptions of various authors, summarized in Table 1:

<i>Sources</i>	<i>Concept /objective on management accounting</i>
Anderson, Needles and Cadwell (1989)	Process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information used by managers to plan, assess and control within the organization to ensure appropriate use and <i>accountability</i> of its resources.
Louderback <i>et al.</i> (2000)	Provide information to support the needs of internal managers of the organization.
Anthony and Welsch (1981)	Supply useful information to managers, who are persons within the organization.
Hansen and Mowen (1997)	Identify, collect, measure, classify and report information that is useful to managers in planning, control and the decision process.
Horngren, Foster above Datar (2000)	Measure and report the financial and non financial information which help managers to take decisions, to achieve the objectives of the organization.
Horngren, Sundem and Stratton (2004)	Process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information that assist the managers to reach organizational objectives.

Chart 1: Comparison of available evaluations

Source: Frezatti *et al.* (2007, p. 12)

The main points in common in terms of concepts/objectives are:

Composition of the process: The stages of the process that involves management accounting are similar, some more comprehensive and detailed, and include: identification, measurement, accumulation, analysis, preparation, interpretation and communication of information.

Information to users: In relation to the way of referencing to which the information are intended, they are both directed to users more comprehensively (internal users) and more specifically, in terms or the decision process (managers). Generally speaking, the consequences of this separation are more of a semantic order.

Support to decision process: The description of the stages of the process (plan, assess and control) coexists with more generic terms (support the needs of managers or useful information, which help managers to achieve organizational objectives).

Connection with objectives of the entity: it can be described as “[...] help managers to reach their organizational objectives.” (Horngren *et al.*, 2004, p. 4).

3. PRINCIPAL DIFFERENCES BETWEEN FINANCIAL AND MANAGEMENT ACCOUNTING

The complexity inherent to management accounting begins by the way how it can be treated. To some researchers, it does not present significant differences in relation to financial accounting and, for others, it can constitute something totally different. Its characterization, therefore, must occur by elements that the literature presents as distinct. In this research, one has chosen to use a comparative perspective of elements that permit to understand its existence from differences in relation to financial accounting. Observing the differences, people can decide if the management accounting is necessary and if the cost/benefit justifies

it. Several authors describe differences among financial and management accounting, according to the table below.

<i>Sources</i>	<i>Elements of differentiation with financial accounting</i>
Anderson, Needles and Cadwell (1989)	<ol style="list-style-type: none"> 1.Primary users of information 2.Types of accounting systems 3.Restrictions of definitions 4.Measurement units 5.Focus of the analysis 6.Frequency of reports 7.Degree of reliability of information generated
Louderback <i>et al.</i> (2000)	<ol style="list-style-type: none"> 1.Different audiences (internal and external to the company) 2.Focus of classification (controllability, behavior and responsibility in the case of management accounting) 3.Sources of information (in the event of management, not only financial) 4.Specific user <i>versus</i> generalized user 5.Focus on past information and focus on information that permits to understand, plan and predict the future
Anthony and Welsch (1981)	<ol style="list-style-type: none"> 1.Structure: financial accounting 2.Principles: GAAP <i>versus</i> the three principles 3.Includes non monetary information 4.Different temporal foci: past and future 5.Frequency of reports 6.Different foci on precision 7.End in itself or not
Hansen and Mowen (1997)	<ol style="list-style-type: none"> 1.Specific x general rules
Hornngren, Foster and Datar (2000)	<ol style="list-style-type: none"> 1.Guiding principles 2.Different emphases on past and future 3.Different interests on behavior
Hornngren, Sundem and Stratton (2004)	<ol style="list-style-type: none"> 1.Primary users 2.Freedom of choice 3.Behavioral implications 4.Time focus 5.Time horizon 6.Reports 7. Outline of activities

Chart 2: Principal differences between financial and management accounting

Source: Frezatti *et al.* (2007, p. 13)

The differentiation aspects were considered in the preparation of questions to identify the peculiarities of each accounting. As it was to be expected, each author discusses the theme in his peculiar way. The first effort consisted in agglutinating the approaches, from the congruence of elements which correspond to the points of the research analysis. Generally speaking, the most emphasized differences were (Frezatti *et al.*, 2007):

- Primary users of information – emphasized by Anderson *et al.* (1989), Louderback *et al.* (2000) and Hornngren *et al.* (2004). In the case of financial accounting, one is dealing with persons and entities external to the entity, while, in management accounting, it is the various hierarchical levels and even of functional internal areas constituted in the users.

- Types of accounting systems – emphasized by Anderson *et al.* (1989), Louderback *et al.* (2000) and Anthony and Welsch (1981). In the case of financial accounting, the approach of the double matches is compulsory, while, in management accounting, there may be adjustments without compensation. In the latter, different information systems from those

used in financial accounting and even non-monetary information can be used.

- Freedom of choice – emphasized by Anderson *et al.* (1989), Anthony and Welsch (1981), Hansen and Mowen (1997), Horngren *et al.* (2000) and Horngren *et al.* (2004). Financial accounting has as a characteristic compulsory adherence to accounting principles. In management accounting, even though it is fundamental that they are defined, there may not be formalized criteria.

- Measurement units – emphasized by Anderson *et al.* (1989) and Anthony and Welsch (1981). In terms of measurement unit, the currency used in financial account is the local currency of the country. In turn, in management accounting, any currency may be used and may consider, in fact, non-monetary measurement units, such as labor hours, kilos, liters, etc.

- Focus of analysis – emphasized by Anderson *et al.* (1989), Louderback *et al.* (2000), Anthony and Welsch (1981), Horngren *et al.* (2000) and Horngren *et al.* (2004). This requirement can be understood in different ways. It can take into account the perspective of detailing that the reports require or even the past or future dimension intended. One can have a different behavioral perspective in relation to a given area or group of managers.

- Frequency of issuance of statements to users – emphasized by Anderson *et al.* (1989), Anthony and Welsch (1981) and Horngren *et al.* (2004). The temporal question may affect the theme both for the period of the scope and by the frequency of reports.

- Degree of reliability – emphasized by Anderson *et al.* (1989) and Anthony and Welsch (1981). The reliability is linked to the objectivity and possibility of verification, materializing by some type of audit in financial accounting. In management accounting, in normal conditions, in function of the subjectivity of certain numbers, this possibility of audit proves different.

- Existence of regulating bodies or definers of rules. Because financial accounting is normative, bodies can be found, connected or not to governmental authorities, which define or recommend rules and principles for the preparation of statements. In other cases, these same norms are used by management accounting not by imposition but by convenience.

- Legal requirement of specialized professional. In some countries, the responsibility and authority to prepare the financial accounting statements are limited to professionals graduated in accounting and registered in their class entities. In management accounting, on the other hand, this obligation cannot be the standard.

4. DESIGN OF FIELD RESEARCH

The research was characterized as empirical-analytical, of the descriptive type and proposes, as a result, to describe the perception of professors of post graduation in accounting science on management accounts in Brazil.

4.1 Structure of the questionnaire

The structuring of the questionnaire, as an instrument of collection of data, took into account a combination of the approach of various authors, as presented in topics 2 and 3. Once the desired elements were identified, the variables selected to capture these data were specified considering their respective scales (Table 3) and, then, the questions of the questionnaire were presented.

The data were collected in the binary and ordinal scales. In questions in connection with the ordinal scale, answers were agglutinated such as “I totally agree” and “I partially agree”. In turn, in block 10, the indications of the themes were grouped from the three preferred indications of each researcher.

<i>Description</i>	<i>Block</i>	<i>Scales</i>	<i>No. of Respondents</i>	<i>Focus of Questions</i>	<i>No. of Questions</i>
Primary users of the information	1	Ordinal	41	1.1 Users of management accounting	6
		Ordinal	40	1.2 Characterize the manager	
		Binary	40	1.3 Need for two systems	
		Ordinal	40	1.4 Motives to have two types of accounting	
Types of accounting systems	2	Binary	40	2.1 Database of financial accounting	2
		Binary	40	2.2 Non-monetary database	
Freedom of choice	3	Binary	40	3.1 Use of equal accounting principles (CG e CF)	3
		Binary	40	3.2 Motives of the differences between CG and CF	
Measurement units	4	Binary Response open	40	4.1 Currency of decision of CG and CF	1
Focus of analysis	5	Ordinal	40	5.1 Degree of detail of the CF data structure	2
		Ordinal	39	5.2 Degree of detail of the CG data structure	
Frequency	6	Binary	39	6.1 Temporal horizon and frequency of issue of the CF and CG reports	1
Degree of reliability	7	Binary	39	7.1 Enforceability of some audit procedure	1
Regulatory or influential bodies	8	Ordinal	39	8.1 Influence by bodies or persons in CF	2
		Ordinal	39	8.2 Influence of bodies or persons in CG	
Technical Officer in charge of preparation	9	Binary	40	9.1 Accreditation as compulsory factor	2
		Binary	40	9.2 Graduation in accounting as compulsory	
Themes	10	Ordinal	40	10 Important themes of management accounting	1

Chart 3: Relationship between concept and focus of questions

Source: Anderson *et al.* (1989) e Horngren *et al.* (2004) adapted.

4.2 Identification and analysis of the adequacy of the respondent

The respondents are the management accounting professors who work in the postgraduate programs in accounting science in Brazil. Their identification was made by the coordinators of the *stricto sensu* postgraduate programs. From the universe of 51 faculty members, 80% have complied with the request for filling in the questionnaire. Some questions were not answered by all faculty members, which did not impair the analyses conducted.

4.3 Treatment and analysis of data

The treatment of data takes into account descriptive statistics, considering each block

of questions (Table 3). The variables considered to provide the explanatory power (age, sex, title, time that the person has held the title, professional origin, etc.) were used as discriminating factors in the analyses of occurrences that drew attention.

5. ANALYSIS OF THE DATA

Initially the data in connection with the profile of respondents are presented and, afterwards, the analysis of the data collected in each block of the questionnaire. With respect to the profile of respondents, one can highlight that the average age is 46 years old, with an average period with the title of 7 years and 6 months. The predominant titling of doctorate is accounting (63%), according to Table 1.

Table 1: Formation of respondents

<i>Doctorate Title</i>	<i>Number</i>	<i>%</i>
Accounting Science	26	63
Production Engineering	6	15
Administration	2	7
Others	6	15
Total	40	100

From the 40 professors, 34 (85%) have predominant experience in the area of management accounting, 5 (13%) have predominant experience in the area of the financial accounting and 1 of the professors has experience in both areas (financial and management).

An aspect to be highlighted is in connection with the migration of professionals from one area to the other. From the 40 respondents, 28 (70%) specified his/her graduation or doctorate title and, from these, 17 (61%) graduated in accounting, whereas only 5 (29.4%) took a PhD course in other areas and 2 (7.1%) graduated in economics and accounting, and 1 obtained a title in accounting and another in administration. From 9 remaining respondents (32%), whose graduation was in other areas (administration, economics, mathematics or engineering), only 1 obtained the title of doctor in the same area in which he graduated and 8 of them (88.9%) obtained the PhD in another area, from which 5 obtained their title in accounting.

5.1 Primary users of management accounting

Table 2: Basic users of management accounting information

	<i>Totally disagree</i>	<i>Partially disagree</i>	<i>Neither agree, nor disagree</i>	<i>Agree partially</i>	<i>Totally agree</i>
Managers	-	-	-	5.0%	95.0%
Shareholders	15.4%	28.2%	12.8%	25.6%	18%
Government	57.9%	26.3%	7.9%	5.3%	2.6%
Creditors	42.1%	21.0%	15.8%	15.8%	5.3%

The purpose of Block 1 of the questionnaire was to identify which are the basic users of management accounting information, in the opinion of the professors. The analysis of Table 2 permits to identify that 95% of the respondents totally agree that the managers area users of management accounting, while the other 5% partially agree. For 43.6%, the shareholders, in some way, used management accounting, which can be explained by the

strong presence of controlling shareholders in company management in Brazil. The government was considered as a user by 7.9% of respondents. It draws attention that 21.1% consider the creditors as users of management accounting. A possible explanation results from the fact of financial institutions requesting this complementary information to companies, including of a management nature. The questionnaire permitted still the appointment of other users, with the indication, for example, of employees and analysts in the area of investments as users, however, by a not very expressive number of respondents.

Table 3: Identification of manager

	<i>Totally disagree</i>	<i>Partially disagree</i>	<i>Neither agree, nor disagree</i>	<i>Partially agree</i>	<i>Totally agree</i>
Management and managers	-	-	-	5.0%	95.0%
Supervisors	5.0%	5.0%	-	30.0%	60.0%
Analysts	21.6%	13.5%	10.8%	24.3%	29.8%
All the employees	46.0%	21.6%	8.1%	10.8%	13.5%

As observed in Table 2, 95% of respondents consider the manager as the basic user of accounting information. In the following question, one sought to identify this manager (Table 3).

Totally or partially agreeing, the interviewees strongly associate the figure of manager to directors and managers (95%+5%=100%), supervisors (60%+30%=90%) and analysis (24.3%+29.8%=54.1%). The total employees did not significantly associate with the figure of administrator. However, considering the open answers, he starts to be associated to the figure of administrator when the employee is delegated authority and responsibility.

When questioned about the need for two accounting systems, one for financial accounting and another for management accounting, to comply with the information needs of users, 56.1% affirm that there is a need and 14.6% that there isn't. For the remaining 29.3%, this need will depend on factors such as: (i) type of system adopted by the organization; (ii) organizational culture; (iii) size of company; (iv) type of information required.

5.2 Types of accounting systems

Block 2 of the questionnaire sought to identify the perception in connection with the accounting information system used.

The first question of this Block sought to identify the perception of respondents with respect to the use of integrated management systems by the organizations. In the opinion of 75.6% of respondents, the companies do not use integrated management systems.

For 22.0%, the companies are in the phase of implementation and only for 2.4%, the companies adopted this type of system. This perception has consequences on what the faculty member prioritizes and teaches, since the student's reality needs adaptation.

As demonstrated in Table 4, for 95% of respondents, accounting uses other databases in addition to the financial one, and non-monetary data were pointed out as significant in management accounting by 89.2% of respondents.

Table 4: Management accounting database

	<i>Yes</i>	<i>No</i>
EXCLUSIVELY the financial accounting database	17.1%	82.9%
EXCLUSIVELY another monetary database, which other than financial accounting	8.8%	91.2%
Additionally the original financial accounting database uses other bases	95.0%	5.0%
Additionally other non-monetary databases	89.2%	10.8%

5.3 Freedom of choice

With Block 3, one sought to identify the degree of freedom of choice of the procedures used by management accounting.

This questioning was centered on the application of accounting principles and if these could be applied in different ways by financial and management accounting. For the majority of interviewees, the principles of entity and continuity must be applied in the same way by the two forms of accounting. The other principles may be adjusted to the needs of users, in the opinion of respondents, as demonstrated on Table 5.

Table 5: Impact of principles on accounting information

	<i>Yes</i>	<i>No</i>
Entity	25.0%	75.0%
Continuity	25.0%	75.0%
Historic cost as value base	80.0%	20.0%
Realization of revenue and confrontation with expenses	67.5%	32.5%
Prudence (Conservatism)	67.5%	32.5%
Materiality (Relevance)	50.0%	50.0%

5.4 Measurement Units

Block 4 of the questionnaire dealt with perception in connection with the exclusive use of measurement in currency, both by financial accounting (CF) and by management accounting (CG).

Only 5 respondents (12.5%) agree that the two forms of accounting must use exclusively monetary measurements. Among them, only one justified his answer:

Yes, because management accounting is supported on financial accounting, whose measurement principles at least in relation to financial reports, are the same. The inclusion of non monetary items in the reports is a function of controllership, whose role is more ample and for which, both financial and management accounting are only tools, among others that it uses to perform its function.

From the 35 professors who answered "No" (87.5%), only 4 (10% of the total) did not specify other types of measurements. Among the specifications of other measures are found the most varied types, in the more generic form, such as *measures that are relevant to decision-making and non-financial indicators*; and in their more specific form, such as *hours, kilos, liters, number of employees, tons, number of complaints, volumes, percentages, number of events, level of satisfaction*.

Among those who answered yes, one is a PhD in Economics and the others are PhD's in accounting. The average of years they have held this title of the 5 respondents is 8.2 years.

On the other hand, among those who answered No, 51.4% are PhD's in accounting, 14.3% in Engineering, 8.6% in Administration, 5.7% in other areas (economics and agribusiness) and 20% did not specify their title. The average of years of holding the PhD title of this group is 7.5 years.

5.5 Focus of analysis

Block 5 of the questionnaire sought to capture the perception of professors in connection with the focus of the forms of accounting. Table 6 presents the result on the focus of Financial Accounting.

Table 6: Focus of Analysis of Financial Accounting

	<i>DT</i>	<i>DP</i>	<i>NCND</i>	<i>CP</i>	<i>CT</i>	<i>Total</i>
The information value more the company as a whole than the parties	2 5%	2 5%	5 12,5%	14 35%	17 42.5%	40 100%
	10% (D)		77.5% (C)			
The business units are valued in analysis and disclosure of information	13 32.5%	8 20%	6 15%	8 20%	5 12.5%	40 100%
	52.5% (D)		32.5% (C)			
The cost centers are valued in analysis and disclosure of information	16 40%	10 25%	4 10%	7 17.5%	3 7.5%	40 100%
	65% (D)		25% (C)			
The analyses by product groups are valued in the analysis and disclosure of information	14 35%	7 17.5%	6 15%	8 20%	5 12.5%	40 100%
	52.5% (D)		32.5% (C)			
The analyses by projects are valued in analysis and disclosure of information	18 45%	6 15%	3 7.5%	8 20%	5 12.5%	40 100%
	60% (D)		32.5% (C)			
The plan of accounts of the financial statements is the only one for both types of accounting, although with different details	9 22.5%	6 15%	9 22.5%	9 22.5%	7 17.5%	40 100%
	37.5% (D)		40% (C)			

Caption: *DT* – Totally disagree; *DP* – partially disagree; *NCND* – Neither agree nor disagree *CP* – Partially agree; *CT* – Totally agree; **(D)** – sum of % *DT* and *DP*; **(C)** – sum of % *CP* and *CT*.

Generally speaking, there is a relative convergence in the perception of professors that the focus of CF is more in the company as a whole than in the parties that make it up (77.5% of respondents totally or partially agree). Only 10% of respondents totally or partially disagree with this affirmation.

When analyzed, the title of PhD of those who agree and disagree with this focus, one notices that there are great differences, as 54.8% and 55.6%, respectively, are PhD's in Accounting. The distinction is in the number of years they have held the title: 12 and 6 years respectively. Only 5 of the respondents (12.5%) were in an intermediary position (neither agree nor disagree).

With respect to the discordance on the valuing of business units (52.5%), cost centers (65%), product groups (52.5%) and projects (60%), one can observe a weaker convergence (there were 30 distinct respondents, from whom 63.3% are PhD's in Accounting, with title on average for 6.5 years).

Some of the professors positioned themselves in an intermediate way (neither agree nor disagree) with respect to the valuation, by CF, of business units (15%), cost centers (10%), product groups (15%) and projects (7.5%). Among them (10 different respondents),

one observed that 4 are PhD's in Accounting (4.6 years with title on average), 2 are PhD's in Administration and agribusiness, respectively, and 4 did not specify.

The group of professors that, somehow, agree (partially or totally) that the focus of CF is in business units (32.5%), cost centers (25%), product groups (32.5%) and projects (32.5%) is formed by 18 different respondents. From these, 8 are PhD's in Accounting (6.5 years with title on average), 4 are PhD's in Engineering, 2 are PhD's in Administration, 2 are PhD's in Economics and 2 did not specify.

With respect to the affirmation that the accounts plan of financial statements is single for both fields of accounting (CF and CG), even though with different details, one observed a dispersion in opinions: 37.5% disagree (totally or partially), 22.5% neither agree nor disagree and 40% agree (totally or partially).

Table 7 presents the result of the focus of **Management Accounting**:

Table 7: Focus of Analysis of Management Accounting

	<i>DT</i>	<i>DP</i>	<i>NCND</i>	<i>CP</i>	<i>CT</i>	<i>Total</i>
The information value more the company as a whole than the parts	12 30.8%	8 20.5%	6 15.4%	7 17.9%	6 15.4%	39 100%
	51.3% (D)			33.3% (C)		
The business units are valued in the analysis and disclosure of information	-	-	3 7.7%	5 12.8%	31 79.5%	39 100%
	0% (D)			92.3% (C)		
The cost centers are valued in the analysis and disclosure of information	-	-	1 2.6%	7 17.9%	31 79.5%	39 100%
	0% (D)			97.4% (C)		
The analyses by product groups are values in analysis and disclosure of information	-	-	2 5.1%	6 15.4%	31 79.5%	39 100%
	0% (D)			94.9% (C)		
The analyses by projects are valued in analysis and disclosure of information	-	-	2 5.1%	5 12.8%	32 82.1%	39 100%
	0% (D)			94.9% (C)		
The accounts plan of the financial statements is single for both fields of accounting, although with different details	8 20.5%	5 12.8%	8 20.5%	9 23.1%	9 23.1%	39 100%
	33.3% (D)			46.2% (C)		

Caption: *DT* – Totally disagree; *DP* – Partially disagree; *NCND* – Neither agree nor disagree; *CP* – Partially agree; *CT* – Totally disagree; **(D)** – sum of the % *DT* and *DP*; **(C)** – sum of the % *CP* and *CT*.

The perception of the professors that the focus of CG is more on the company as a whole than on its parts is shared by 33.3% of respondents (totally or partially agree). Among the 13 respondents of this group, 46.2% have a PhD in Accounting (7.2 years with title on average), 38.4% in other areas (1 in Administration, 2 in Economics and 2 in Engineering) and 15.4% did not specify.

The majority of respondents (51.3%) disagree with this affirmation (totally or partially). Among the 20 respondents of this group, with respect to the PhD, 65% are in Accounting (6.7 years with title on average), 20% in other areas (1 in Administration and 3 in Engineering) and 15% did not specify. Only 6 respondents (15.4%) positioned in an intermediate way (neither agree nor disagree), from which 50% are PhD's in Accounting (5.3 years with title on average).

A significant result can be observed in relation to agreement (total or partial) that the focus of management accounting is turned to business units (92.3%), cost centers (97.4%),

product groups (94.9%) and projects (94.9%). It is almost unanimous, given that none of the respondents disagreed (39 different respondents, from whom 56.4% are PhD's in Accounting, with title for 6.6 years on average).

Some professors positioned themselves in an intermediate way (neither agree nor disagree) with respect to valuing, by financial accounting, of business units (7.7%), cost centers (2.6%), product groups (5.1%) and projects (5.1%). Among these professors (6 different respondents), 1 is a PhD in Accounting (title for 6 months), 2 are PhD's in Administration and Agribusiness, respectively, and 3 did not specify.

In relation to the affirmation that the accounts plan of the financial statements is unique for both fields of accounting, although with different details, one observed a dispersion in opinions: 33.3% disagree (totally or partially), 20.5% neither agree nor disagree and 46.2% agree (totally or partially).

5.6 Frequency of issuance of reports

Block 6 of the questionnaire sought to capture the perception of professors in connection with the frequency of issuance of reports by CF and CG (question 6.1). The result of this questionnaire is presented on Table 8:

Table 8: Frequency of issuance of reports

	<i>Financial Accounting</i>				<i>Management Accounting</i>				<i>Resp.</i>
	<i>DR</i>	<i>BP</i>	<i>FC</i>	<i>OIC</i>	<i>DR</i>	<i>BP</i>	<i>FC</i>	<i>OIC</i>	
<i>Weekly</i>	2 5.6%	- 0%	10 27.8%	7 19.4%	20 55.6%	7 19.4%	29 80.6%	29 80.6%	36 100%
Monthly	25 64.1%	19 48.7%	16 41%	16 41%	25 64.1%	25 64.1%	19 48.7%	20 51.3%	39 100%
Quarterly	19 73.1%	20 76.9%	16 61.5%	14 53.8%	11 42.3%	16 61.5%	10 38.5%	12 46.2%	26 100%
Biannually	10 62.5%	12 75%	8 50%	7 43.8%	12 75%	11 69%	11 69%	10 62.5%	16 100%
<i>Annually</i>	14 77.8%	14 77.8%	13 72.2%	12 66.7%	11 61.1%	11 61.1%	11 61.1%	11 61.1%	18 100%

Caption: *DR* – Income Statement; *BP* – Balance Sheet; *FC* – Cash Flow Statement; *OIC* – Other Accounting Information; *Resp.* – Number of respondents.

One observes that weekly periodicity is preponderantly noticed by respondents as being more of a characteristic of CG, on the other hand, the quarterly annual frequencies were associated to CF, but not so preponderantly.

5.7 Degree of reliability

The reliability that the information may have is noticed, according to the authors identified, by the demand for audit procedures. Given a certain cost/benefit, the various types (with different foci and depth) were considered relevant.

Internal audit emerges as preponderant both for financial and management accounting (62% of respondents). External audit is noticed as predominantly geared to financial accounting (84.6% of respondents). A smaller portion of respondents considers that both would require external audit (12.8%). The auditing of the headquarters, analogously to

internal audit, has a more significant portion of respondents considering that both financial and management accounting should be submitted to it (60.5%).

As seen, the logic of the expectation of the relatively greater control, facility in obtaining information, complexity of assumption of responsibility and the cost/benefit of the audit, in the view of respondents, directs efforts differently, demanding more attention for financial accounting. In any case, the expectation of use both in internal audit as in that of the headquarters in management accounting is very significant.

5.8 Regulating bodies of influence

The interest in identifying who influences management accounting normatively, or even for orientation, results from the perspective of how it has or not freedom to develop.

In a diminishing sequence of influence, the respondents identified “the administrators” (100%), “to headquarters” (97.4%), “controllers” with 76.9% and “other companies” with approximately 55%. In turn, “Brazilian Corporate Law (Lei das SA’s, CPC (Accounting Pronouncements Committee), CVM (the Brazilian equivalent to the SEC in the US), RF (Fixed Income), Federal Organizations, Municipal Organizations, International Agencies” influence relatively less, percentages being obtained between 5 and 18%.

The answer, which is consistent with the research made in various countries reinforces certain. First of all, the comprehension that the administrator plays an active role in the definition of management accounting.

This freedom can be smaller in the case of entities that have a headquarters, which exercises the role of delimiting. Finally, the mimetic perspective of seeking to adopt in the organization practices which have achieved success in other companies is present.

5.9 Technical Officer in charge of preparation

The majority of respondents (62.5% of faculty members investigated, with predominance of faculty members graduated in Accounting Science) consider that the registration in the class entity must be required only for the generation of financial accounts statements. A smaller portion (25%) considers that it should be required both for financial and management accounting statements. Another group that emerges considers that it should neither be necessary to the financial accounting nor management accounting statements (12.5%). When the question turns to the requirement for graduation in accounting science, the tone of the answers is similar, i.e., 50% of respondents consider that the professional should have graduated in Accounting, 27.5% consider that, both for financial and management accounting, the person in charge should have graduated in Accounting Science and 22.5% indicates that said graduation should not be necessary. When we relate the two questions, one notices greater tolerance to graduation and less in terms of registration in CRC (the Accounting Council).

5.10 Relevant themes of management accounting

The management accounting themes more valued by respondents can be observed on Table 9.

Table 9 – List of thematics by order of relevance

<i>Thematic</i>	<i>%</i>
Management information system	68.3%
Management reports	68.3%
Formal strategic planning	41.5%
Budget	22.0%
Strategic cost management	19.5%
Performance assessment	19.5%
Cost/accumulation system/cost system methods	12.2%
Business unit	9.8%
Governance	4.9%
Residual profit	2.5%
Real options	2.5%
Beyond Budget	2.4%
Activity based cost/management	2.4%
Balanced Scorecard	2.4%
Logistics	2.4%
Internal Benchmarking	2.4%
Investment cash flow	-
Value chain analysis	-
Benchmarking	-

The majority of respondents chose as more relevant the themes related to management information systems and management reports (68.3%), formal strategic planning (41.5%), budget (22%), performance assessment and strategic cost management (19.5%). Certain considerations can be made based on these findings. The indication of themes: management information systems and management reports, as main themes of the area can indicate the influence of controllership books published in Brazil, which have emphasized these subjects. The same consideration is made in relation to the thematic on performance assessment. To assess the performance of organizations, units, goods and services, constitutes one of the main functions of management accounting (Atkinson *et al.*, 2000). To this effect, the motive of the (relatively) small relevance of the theme to respondents should be investigated.

It draws attention the fact that the budget theme is not considered more relevant, which evidences a perception, in Brazil, that is incongruent with the vision of the international community, according to which budget is, probably, the most used management tool in organizations (Davila and Wouters, 2005, p. 587). In general, this is one of the themes that most motivates research in international periodicals and is one the central themes of management accounting in general (Luft and Shields, 2003; Hansen *et al.*, 2003 and Covalleski *et al.*, 2003).

Relevantly recent themes, and quite discussed in the past 20 years, have also not proven relevant to the majority of respondents. These themes include costing and management based on activities (2.4%), *balanced scorecard* (2.4%), *beyond budget* (2.4%) and residual profit (2.5%).

6. Conclusions

This research has sought to capture the perception of professors of postgraduate courses in accounting science on management accounting in Brazil. The representativeness of

the results achieved is evidenced by the fact that the *stricto-sensu* programs in accounting science in Brazil were invited at the time of the research, involving 18 Further Education institutions.

Considering that (i) heterogeneity is a relevant characteristic in the Brazilian faculty milieu, this was verified through the answers and (ii) analyses of data obtained, in essence management accounting, in Brazil, is perceived by professors of postgraduate courses in Accounting Science as follows:

- The main user of management accounting (CG) is the administrator, there is not disagreement about this, and he was more strongly associated to directors and managers (100% agreement) and with supervisors (90% agreement). This reveals at the same time a strong concern with the "top of the pyramid", due to its decision power and also by the more operating levels. The consequence of this perception is that the vastness of knowledge becomes very large to meet the scope;

- Use, by CG, of systems that are supported by the financial accounting database together with other bases (95%), including with non-monetary bases (89.2%). This question provoked a relevant reflection regarding the potential to meet demands for ever more sophisticated and non standard information;

- Non exclusive user of currency measurements by CG (87.5%);

- Among the accounting principles, the principles of entity and continuity must not be applied differently by the two fields of accounting (75%);

- The focus of CG is more geared to the parts that make up organization: business units (92.3%), cost centers (97.4%), products and projects (94.9%), whose reporting was associated more strongly to lower frequencies (weekly and monthly) and whose reliability was associated to internal audit (62%) and audit of the headquarters (60.5%);

- The influence of regulating entities, such as class entities (95%), CPC (90%) and bodies and tax legislation (77.5%) were more strongly associated to financial accounting, whereas the main entities that influence CG are administrators (100%), the headquarters (97.4%) and controllers (76.9%). This vision permits to think that responsibility in the development of management accounting is actually based on the administrator and that he must be prepared to understand and decide what he wants;

- Requirement of registration in class entity and of graduation in accounting science for the preparation of the financial accounting statements (87.5% and 77.5%, respectively);

- Main themes dealt with in CG: management information system and management reports (68.3%), formal strategic planning (41.5%) and budget (22%). One notices that the most recently developed artifacts are not very valued. The three most cited are the traditionally known.

Despite the points above converging significantly with the literature researched, one should emphasize some reasonably dissonant ones. The most relevant are (i) 43.6% of respondents agree (totally or partially) that the shareholder is one of the primary users of management accounting; (ii) 50% of respondents agree and 50% disagree that the principle of relevance must be applied in management accounting differently from financial accounting; and (iii) relatively recent themes, such as activity based cost, *balanced scorecard* and *beyond budget*, were not valued by respondents. A possible explanation for the item (i) comes from the characteristic of the Brazilian capitals market, where the figure of the controlling shareholder is still very strong, who has privileged access to information. On the other hand, in relation to other items, new investigations would apply.

This work diagnosed the perception of the professors of the area, which is justified by the fact that the development of management accounting depends, among other factors, on the community knowing itself. Because one is dealing with the area of learning where environment and situation can be very different, to know the perception of faculty members, who form professors, researchers and administrators, will contribute as a point of departure for the identification of potentialities and gaps in management practices in Brazil. For such, other studies will be necessary, such as capturing the perception of the professionals of the management area, compare the perception of Brazilian professors and those of other countries. This reflection must be stimulated so that, consistently, the area produces knowledge in an ever more complex and globalized environment where competitiveness can emerge both by the way that management is developed in the organization.

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