

## INFLUENCE OF STRATEGIC POSITIONING ON ADOPTION OF FINANCIAL MANAGEMENT PRACTICES IN THE CONTEXT OF SMALL INDUSTRIES

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### ABSTRACT

The objective of the study was to identify the influence of strategic positioning on the adoption of financial management tools in the context of small industries in the AMUREL (Brazilian Portuguese abbreviation for the Laguna Region Municipalities Association) micro-region and, additionally, to seek an answer to the hypothesis about the possibility that the level of use of financial management practices is equal in small companies regardless of strategic positioning adopted. Methodology classified as descriptive and quantitative was used and the data collection has taken place by means of a questionnaire based on the so-called Contingency Theory in the analysis of the strategic positioning and in the financial management tools of the four stages listed by the International Federation of Accountants. As a result, it has been found that the management practices of the first and second stages are the most used (with an average of 55.91% and 69.32%, respectively) when compared with the instruments belonging to the third (40%) and fourth stages (44.46%). The main contribution of the study is to point out statistical evidence that the strategic positioning chosen by small industries does not affect the level of use of financial tools in this business context.

**Keywords:** Strategic positioning. Management tools. Small industries.

An article awarded at the 9<sup>th</sup> UFSC (Brazilian Portuguese abbreviation for the Federal University of the State of Santa Catarina) Controllershship and Finance Congress, September 16 and 17, 2019 in the Brazilian city of Florianópolis, SC.

**Submission on** 1/9/2020. **Accepted on** 3/10/2020. **Published on** 6/15/2020.

## 1 INTRODUCTION

The Contingency Theory is based on the theoretical platform that aims to identify how organizations are influenced by contingency factors, which can be any variables that moderate the effect of organizational characteristics on companies' performance (Donaldson, 2001; Chenhall & Chapman, 2006; Junqueira, Dutra, Zanquetto Filho & Gonzaga, 2016). In this sense, contingency factors can be sundered into two groups: external and internal ones. In the case of external aspects, the influence of environmental uncertainty should be assessed (Beuren & Fiorentin, 2014) and also clients' power (Abdel-Kader & Luther, 2008; Klein & Almeida, 2017) while, within the scope of internal factors, items such as companies' competitive strategies adopted can be evaluated (Chenhall, 2006; Rufatto, 2018), in addition to their structure (Lavarda & Gorla, 2012; Jordão & Souza, 2013) and size (Klein & Almeida, 2017).

Therefore, it is appropriate to consider that the choice of strategic priorities is impacted by the analysis of the competitive forces existing in the companies' operating segment, according to Porter (1991). Thus, according to Mintzberg, Ahlstrand and Lampel (2010), the strategy shall contribute to the organizational structure design to be used, as is the case with the management control system and the respective management practices (Leite, Diehl & Manvailer, 2015). Therefore, it is consistent to assume that the competitive forces model premises influence the definition of generic strategies to be adopted and that, as the strategies shape the structure, the management control system shall be shaped by the chosen strategy (Junqueira et al., 2016).

As explained, there are several factors that can modify the reality of organizations, which indicates the need for research that studies the variables that influence the use of financial management practices. However, in the context of small businesses, it is rarer to find publications focusing on this topic, especially due to the limited database available on the subject. This reality is also associated with the small industries of the AMUREL micro-region in the south of the Brazilian state of Santa Catarina, since no study on the subject has been published with a similar focus, according to an online survey conducted at the CAPES (Brazilian Portuguese abbreviation for the Brazilian Coordination of Improvement of Higher Education Personnel) Journal Portal in August 2019.

In this sense, the research reported here intends to answer the following question: What is the influence of strategic positioning in the adoption of financial management tools in the context of small industries in the AMUREL micro-region? For this purpose, an objective has been established to identify the influence of strategic positioning in the adoption of financial management tools within the scope of small industries in the AMUREL micro-region.

The road map chosen to carry out such an analysis consists of diagnosing the strategic positioning, as recommended by Porter (1991), to associate it with the financial management practices adopted by small manufacturing companies in the AMUREL region. Thus, a model tested in another business context has been used (Junqueira et al., 2016), which shall make it possible to compare the results and, at the same time, diagnose the reality of AMUREL's small industries.

The approach chosen can be initially justified by the economic relevance of small companies, which are responsible for a large part of the generation of jobs and income in Brazil (Santos, Dorow & Beuren, 2016; Almeida, Valadares & Sedyama, 2017) and also in European countries (Malik & Jasinska-Biliczak, 2018; Nigri & Baldo, 2018). In addition, there is little research on the influence of strategic positioning in the context of small industrial companies, which allows considering the existence of a research gap to be explored, as aimed at in this study.

## **2 LITERATURE REVIEW**

Among the theories that have been used in investigations about the use of accounting concepts and tools is the Contingency Theory (Donaldson, 2012; Klein & Almeida, 2017; Moterle, Wernke & Junges, 2019). This approach argues that there is no single (or better) structure in terms of being applicable to all types of organizations since each organizational structure tends to be designed based on various factors in the context of each organization (Otley, 2016). This position is shared by Scapens (2006) when the need to recognize idiosyncratic factors unique to a particular company is stressed so that one can understand the use of management accounting practices. Additionally, Otley (2016) argues that all research in management accounting is essentially contingent since it seeks to discover when certain techniques may be the most appropriate for specific organizations due to the peculiarities that characterize them.

This context can also be associated with small manufacturing companies (such as those covered in this research) as they face difficulties to grow in markets of fierce competition, which can be attributed to contingent factors such as strategies adopted, training of managers and employees, bargaining power before suppliers and customers etc. (Leite, Diehl & Manvailer, 2015; Castro, 2015; Siska, 2016; Maletic et al., 2017; Callado, 2016; Klein & Almeida, 2017; Almeida & Callado, 2018; Honorio & Bonemberger, 2019; Oro & Lavarda, 2019).

However, in this research priority has been given to identifying the influence of the strategic positioning adopted by small manufacturing companies on the level of management practices use. In this regard, it should be noted that the association of strategic positioning with the organizations' operating environment is suggested by Porter (1991) when this one states that the strategy to be adopted should be chosen based on the analysis of the competitive market forces that shall make up the organizations' operating environment (also known as Positioning School), choosing between the generic competition strategies of "low cost", "differentiation" and "focus". However, in this research such strategies are treated as types of strategic positioning because it is after analyzing the competitive forces of the segment in which organizations operate that they must position themselves in order to respond to these forces, opting for strategies based on low costs or differentiation, both of which may have broad or narrow scopes (Porter, 1991).

In this sense, it has been considered that the differentiation strategy refers to the organizations' positioning in relation to competitors, the brand image and the relationship with the target audience, among other aspects discussed in the literature regarding this topic (Porter, 1991). On the other hand, the low-cost strategy assumes that organizations that choose this path must have a high market share, more favorable access to raw materials or supplies, commercialize easily produced or purchased goods, have a wide range of related products and have an extensive customer base. Thus, they must pursue large niche markets and be able to generate high profit value by selling large quantities of products and/or services (Porter, 1991).

Junqueira et al. (2016) mention that these two generic strategies can also be applied in a restricted context and then they are known as "focus". In these cases, the company chooses to work with a specific type of customer, product line or geographic space in order to select a specific audience in a small market segment.

Regarding the selection of management practices to be considered in the research, Almeida and Callado (2018) argue that, given the diversity of these in the Management Accounting literature and the possibilities of use by companies, it is pertinent to define a specific role to integrate a given study. Thus, in this research, the proposition by the International Federation of Accountants (IFAC) (1998) has been prioritized, which splits the development of management accounting into four evolutionary stages and is aligned with research by Abdel-Kader and Luther (2008), who have also distinguished management accounting practices into four stages. In this sense, among the several

recent publications that have chosen to use this division in four stages, are those from: Valeriano (2012); Abdel Al and Mclellan (2013); Leite (2013); Ahmad (2014); Mclellan (2014); Leite, Diehl and Manvailer (2015); Dalchiavon, Wernke and Zanin (2017); Rufatto (2018) and Santos, Corrêa, Beuren and Gomes (2019). However, depending on the study analyzed, small differences are found among the practices classifiable in the four stages, with additions or exclusions according to these authors.

With regard to the contingency factor envisaged, the aspect used in this study was the number of employees of the companies covered, which served to classify them in two groups regarding their size (small- and micro-sized enterprises). The option for this criterion was due to the fact that there would possibly be no restrictions regarding the disclosure of these data by the study participants as well as because it has been adopted in previous studies (Leite, Diehl & Manvailer, 2015; Siska, 2016; Callado, 2016; Maletic et al., 2017; Klein & Almeida, 2017; Almeida & Callado, 2018; Rufatto, 2018).

As for the hypothesis suggested, it dealt with two categories of company: (i) industries adopting the “differentiation” strategic positioning and (ii) factories opting for the generic “low cost” strategy. From this, it was considered that the level of use of financial management practices is the same in small companies, regardless of the strategic position adopted (null hypothesis). So, by taking into account the strategic positioning, management practices and small-sized companies, the construct of the assumption at hand had the theoretical foundation presented in Figure 1.

Aspects	Theoretical framework
Strategic positioning	Porter (1991); Otley (2016); Junqueira <i>et al.</i> (2016); Almeida and Callado (2018)
Management practices	Ifac (1998); Valeriano (2012); Ahmad (2014); Leite, Diehl e Manvailer (2015); Rufatto (2018); Santos <i>et al.</i> (2019).
Size of the company	Maletic <i>et al.</i> (2017); Klein and Almeida (2017); Almeida and Callado (2018)

**Figure 1.** Research Construction

Source: Prepared by the authors.

### 3 METHODOLOGICAL PROCEDURES

As for the methodological aspects, in relation to the objective typology, it should be classified as descriptive, because for Andrade (2002) descriptive studies are concerned with observing the facts, registering them, analyzing them, classifying them and interpreting them without direct interference from researchers in the context.

Regarding the form of approach, the present research may be seen as quantitative, since, Richardson (1999) adds that it involves studies that use quantification, both in the modalities of collecting information and in the processing of this by means of statistical techniques, from the simplest ones (such as percentage, means, standard deviation etc.) to more complex ones (such as correlation coefficients, regression analyses etc.).

In terms of the procedures to collect the data, the survey technique was chosen (Gil, 2010), instrumentalized by means of a questionnaire applied to participants between the months of May and July 2018. This instrument consisted of questions based on the Contingency Theory (Donaldson, 2001; Chenhall & Chapman, 2006), the analysis of the strategic position defended by Porter (1991) and the financial management tools listed by IFAC (1998).

As for the types of questions, in addition to those that captured the characteristics of the participating companies, in the parts referring to strategic positioning and management practices covered, the questionnaire contained questions with five alternative answers (1 – Strongly disagree; 2 – Partially disagree; 3 – Indifferent/Neutral; 4 – Partially agree and 5 – Strongly agree), the scale type of which can be classified as belonging to the standard traditionally called Likert (Dalmoro & Vieira, 2013).

The questionnaires applied were filled out online (in the Google Forms tool) based on information collected from the manufacturing companies' managers. These were contacted through business associations in the selected geographic region by an e-mail containing a link to the respective form as well as in person by a group of students trained by the authors for this purpose.

Regarding the corpus of the research, this comprised a sample that totaled 88 participants extracted from the population consisting of small industrial companies in the AMUREL micro-region whose managers agreed to participate. Therefore, the scope was adapted to the accessibility criteria by the researchers. Also, as criteria for participating in the research, the characteristics of (i) being a manufacturing company with up to 100 employees and (ii) being headquartered in the AMUREL micro-region were selected.

With regard to data analysis, these data were first tabulated in a Microsoft Excel® spreadsheet, where descriptive statistics (frequency and number of responses) were used to summarize the results and facilitate the interpretation of the study "findings". Then, to verify the normality of the data, the Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) tests were used, according to the evaluation extracted from the Statistical Package for Social Sciences (SPSS) software. By the pattern of the responses obtained, it was possible to apply the non-parametric Mann-Whitney U test, which is recommended for the analysis of two independent samples (in this case, one that involves companies that adopt the generic "differentiation" strategy and another for those that use the "low cost" strategy), which serves as an alternative to the Student's t-test and bases its analysis on group means (Rauen, 2015; Bruni, 2012; Triola, 2005).

This test was applied to verify the hypothesis about the two groups of industries covered (adopters of the "differentiation" strategic positioning versus the "low cost" adopters), that is: the level of use of financial management practices is the same in small businesses, regardless of the strategic position adopted (null hypothesis). It should also be noted that the results from the Mann-Whitney U test should be interpreted as follows: (i) if " $\text{Sig} > 0.05$ ", one cannot reject the null hypothesis ( $H_0$ ), accepting the fact that there is an equality between the groups tested and (ii) if " $\text{Sig} < 0.05$ ", the null hypothesis ( $H_0$ ) is refuted and it is necessary to reject the fact that there is an equality between the groups covered (Bruni, 2012).

## **4 PRESENTATION OF DATA AND DISCUSSION OF RESULTS**

The next sections present the main aspects related to the companies surveyed, the data collected and the results from the study.

### **4.1 Characteristics of respondents and companies**

The collected responses made it possible to know the profile of the 88 respondents and the respective industries. In the case of the respondents, characteristics such as "type of relationship with the company", "length of experience in the current position", "level of education", "undergraduate course" and "graduate course" were investigated. As for the characteristics of the companies covered by the study, the following scenario was found:

- 1) Business sector: regarding this characteristic, the responses identified that the greatest concentration occurred in the segment of "garment accessories manufacturing" (14.77%), "food products" (13.64%), "rubber and plastic material" (11.36%) and "metallurgy" (6.82%). In addition to these, some companies were classified as "machinery and equipment", "furniture", "drinks", "lumber", "chemicals", "nonmetallic minerals", "cleaning/personal care products", "textiles (except clothing)" and "other types of industry".
- 2) Tax configuration: those opting for the so-called "Simples" (Brazilian government simplified taxation system; Simplified and Integrated Tax Payment System for Small and

Microcompanies) formed the largest group (with 67.55% of the total) and were followed by the companies that chose the notional profit (17.05%) and the net taxable income (15.91%) modalities.

- 3) Type of company: the predominant format was limited liability companies, with 69.32% of the participants. The second largest group was made up of Individual's Entrepreneurial Entities of Limited Liability (EIRELI in the Brazilian Portuguese abbreviation), with 15.91% of the total answers, and the third set was formed by Individual Microentrepreneurs (MEI in the Brazilian Portuguese abbreviation), as the 13 companies in this category represented 14.77% of the surveyed set.
- 4) Number of employees: 58 of the participating entities (65.91% of the total) have between 20 and 99 employees (small companies), while 26 industries (equivalent to 29.55%) have up to 19 employees (micro-sized companies) and only 4 had just the owner working (4.55%).

#### 4.2 Aspects of the strategic management of the companies surveyed

Regarding the data collected in relation to strategic management, the reality found is summed up in Table 1.

Table 1  
Aspects of strategic management

Items	Disagrees completely or partially (%)	Indifferent or neutral (%)	Fully agrees or partially (%)
Get discounts on purchases (bargaining power with suppliers)	3.41	5.68	90.91
Can impose prices on customers (bargaining power with clientele)	18.18	9.09	72.73
Notices barriers of entry for new competitors in the segment	37.50	19.32	43.18
New entrants are common in the segment	27.27	10.23	62.50
There is a threat of new products or replacements	34.09	14.77	51.14
There is great rivalry between competitors in the segment	14.77	12.50	72.73
Strategy adopted is of differentiation	20.45	13.64	65.91
Strategy adopted is low prices/costs	44.32	21.59	34.09
Strategy adopted is focus (choice to compete in niche markets)	72.73	27.27	-
Advertising spending is a strategic priority	45.45	19.32	35.23
Investments to reduce costs are a strategic priority	9.09	18.18	72.73
Product research and development is a strategic priority	23.86	28.41	47.73
After-sales services and customer service are a strategic priority	25.00	23.86	51.14
Product/service differentiation is a strategic priority	17.05	21.59	61.36
Market research with customers on innovations is a strategic priority	21.59	20.45	57.95

Source: Prepared by the authors.

It was found, then, that most of the companies surveyed (90.91%) manage to obtain discounts from suppliers for everyday purchases, which can be considered an unexpected result due to the small size of the entities participating in this study. On the other hand, most respondents (72.73%) stated that they are able to impose sales prices on customers (that is, they have the power to bargain with customers).

As for the competition aspect, only 43.18% agree that there are barriers to entry for new competitors but 62.50% stated that there are usually new entrants in the segment in which they operate, while 51.14% observe the existence of new products or substitutes on the market. These data may be a justification for the fact that 72.73% of the companies surveyed consider that there is great rivalry among competitors.

With regard to the strategy adopted, almost two thirds (65.91%) reported that they prioritize the “differentiation” position and 34.09% prefer the “low costs” path. Therefore, there was no expression of using “focus” (acting in niche markets) as a strategic option.

The option for “differentiation” is consistent with the answers to questions related to prioritization of product research and development (for 47.73% of the small industries surveyed), provision of after-sales services and customer service (51.14%), search for product/service differentiation (61.36%) and market research with customers about innovations (57.95%). However, it partially contradicts the reduced advertising spending (prioritized by 35.23% of companies) and, in particular, the prioritization of investments to reduce costs (intended by 72.73% of entities).

### **4.3 Management practices adopted**

The questions presented to the participants related to management practices were divided taking into account the stages recommended by IFAC (1998), as shown below.

Regarding the practices of the first phase, the results obtained are listed in Table 2.

Table 2

#### **Management practices adopted - Phase 1**

<b>Items</b>	<b>Disagrees completely or partially (%)</b>	<b>Indifferent or neutral (%)</b>	<b>Fully agrees or partially (%)</b>
Analysis of return on investment	12.50	18.18	69.32
Absorption costing method	23.86	30.68	45.45
Direct costing method	21.59	26.14	52.27
Standard costing method	15.91	29.55	54.55
Variable costing method	18.18	23.86	57.95
Average of phase 1 practices	18.41	25.68	55.91

Source: Prepared by the authors.

In the case of the five practices related to Stage 1, the average of the answers that strongly or partially agree with their use by the managers surveyed was at the level of 55.91%. Of these, the one that stood out the most was the analysis of return on investment (with 69.32% of companies using it) and the one with the lowest adoption level (45.45%) was the absorption costing method.

When the second stage practices were addressed, the scenario summarized in Table 3 was found.

Table 3  
**Management practices adopted - Phase 2**

Items	Disagrees completely or partially (%)	Indifferent or neutral (%)	Fully agrees or partially (%)
Cost-volume-profit analysis	7.95	17.05	75.00
Analysis of present value	11.36	20.45	68.18
Performance evaluation	12.50	12.50	75.00
Internal controls for asset protection	14.77	17.05	68.18
Tax planning	13.64	13.64	72.73
Transfer price	21.59	20.45	57.95
Capital budget	17.05	18.18	64.77
Operating budget	10.23	17.05	72.73
Average of phase 2 practices	13.64	17.05	69.32

Source: Prepared by the authors.

With an average use higher than that seen in the first stage, the eight practices of this group reached an average level of 69.32%. In this sense, it is worth highlighting the four practices that surpassed this level: cost-volume-profit (CVP) analysis and performance evaluation (both with 75% positive responses) and tax planning and operating budget (both with 72.73% agreement on use).

With regard to management practices in the third stage, the reality found is clear in Table 4.

Table 4  
**Management practices adopted - Phase 3**

Items	Disagrees completely or partially (%)	Indifferent or neutral (%)	Fully agrees or partially (%)
Outsourcing analysis	21.59	25.00	53.41
<i>Open book accounting</i>	34.09	40.91	25.00
ABC/TDABC* costing method	21.59	37.50	40.91
Kaizen costing method	36.36	34.09	29.55
Meta costing method	27.27	21.59	51.14
Average of phase 3 practices	28.18	31.82	40.00

**Note.** \* Activity-based costing/time-driven activity-based costing.

Source: Prepared by the authors.

Therefore, it has been found that the average of responses that agree (strongly or partially) with the use of these practices in the companies covered was 40%. This implies considering that such a grouping of practices was the one with the lowest levels of adoption by managers in comparison with the other three stages. In this list, the item that stood out the most was the analysis of outsourcing, as it received 53.41% of responses regarding its use in the small industries of the study.

Regarding the fourth stage practices, the responses obtained allowed the development of Table 5, which summarizes the scenario found.

**Table 5**  
**Management practices adopted - Phase 4**

Items	Disagrees completely or partially (%)	Indifferent or neutral (%)	Fully agrees or partially (%)
Value chain analysis	23.86	30.68	45.45
Balanced scorecard	25.00	31.82	43.18
Value-based management	17.05	30.68	52.27
Interorganizational cost management	15.91	27.27	56.82
Key performance indicators (KPIs)	19.32	31.82	48.86
Economic Management System (GECON)	26.14	37.50	36.36
Theory of restrictions (OCD)	22.73	44.32	32.95
Added Economic Value (EVA)	22.73	37.50	39.77
Average of phase 4 practices	21.59	33.95	44.46

Source: Prepared by the authors.

With the second lowest average adoption (44.46%) among the four stages mentioned, in this group only two practices exceeded the 50% level: value-based management (with 52.27% of the answers agreeing with the use in companies) and interorganizational cost management (with 56.82%). All other phase 4 practices are adopted by less than half of the on-screen industries.

#### 4.4 Mann–Whitney U Statistical Test

With the purpose of obtaining statistical support to provide basis to the conclusions about the research hypothesis considered, the Mann-Whitney test was applied, whose results are detailed in Table 6.

**Table 6**  
**Mann-Whitney test of strategic positioning versus management practices**

Management practices	Posit. Strategic	N	Mean rank	Mann- Whitney U	Z	P-Value (2 tails)
E1 Analysis of return on investment	Different.	58	46.75	739.50	- 1.2433	0.2138
	Cost	30	40.15			
E1 Absorption costing	Different.	58	42.97	781.50	- 0.8215	0.4113
	Cost	30	47.45			
E1 Direct Costs	Different.	58	45.81	794.00	- 0.7085	0.4786
	Cost	30	41.97			
E1 Standard costing	Different.	58	47.17	715.00	- 1.4232	0.1547
	Cost	30	39.33			
E1 Variable costing	Different.	58	46.68	743.50	- 1.1956	0.2319
	Cost	30	40.28			
E2 CVL Analysis	Different.	58	47.42	700.50	- 1.6207	0.1051
	Cost	30	38.85			
E2 Analysis of present value	Different.	58	47.71	684.00	- 1.7308	0.0835
	Cost	30	38.30			
E2 Performance evaluation	Different.	58	46.94	728.50	- 1.3207	0.1866
	Cost	30	39.78			
E2 Internal control for asset protection	Different.	58	45.54	809.50	- 0.5607	0.5750

	Cost	30	42.48			
E2 Tax planning	Different.	58	49.25	594.50	- 2.5751	0.0100*
	Cost	30	35.32			
E2 Transfer price	Different.	58	45.49	812.50	- 0.5266	0.5985
	Cost	30	42.58			
E2 Capital budget	Different.	58	47.22	712.50	- 1.4476	0.1477
	Cost	30	39.25			
E2 Operating budget	Different.	58	46.07	779.00	- 0.8455	0.3978
	Cost	30	41.47			
E3 Outsourcing analysis	Different.	58	45.40	818.00	- 0.4727	0.6364
	Cost	30	42.77			
E3 <i>Open book accounting</i>	Different.	58	46.81	736.00	- 1.2367	0.2162
	Cost	30	40.03			
E3 ABC/TDABC Costing	Different.	58	45.78	795.50	- 0.6837	0.4941
	Cost	30	42.02			
E3 Kaizen costing	Different.	58	44.91	846.00	- 0.2190	0.8267
	Cost	30	43.70			
E3 Meta Costing	Different.	58	47.91	672.00	- 1.8251	0.0680
	Cost	30	37.90			
E4 Value chain analysis	Different.	58	48.08	662.50	- 1.8902	0.0587
	Cost	30	37.58			
E4 <i>Balanced scorecard</i>	Different.	58	46.31	765.00	- 0.9540	0.3401
	Cost	30	41.00			
E4 Value-based management	Different.	58	46.18	772.50	- 0.8915	0.3727
	Cost	30	41.25			
E4 Interorganizational cost management	Different.	58	46.22	770.00	- 0.9169	0.3592
	Cost	30	41.17			
E4 Key Performance Indicators (KPIs)	Different.	58	48.41	643.50	- 2.0678	0.0387*
	Cost	30	36.95			
E4 Economic management system (GECON)	Different.	58	45.26	826.00	- 0.4034	0.6867
	Cost	30	43.03			
E4 Theory of restrictions (TOC)	Different.	58	47.16	716.00	- 1.4372	0.1507
	Cost	30	39.37			
E4 Added Economic Value (EVA)	Different.	58	47.74	682.00	- 1.7283	0.0839
	Cost	30	38.23			

**Note.** \* Statistically significant value.

Source: Prepared by the authors.

As for the results identified in the case of management practices in the first stage, it was assumed that the null hypothesis (H0) considered that the level of use of the five members would be the same among the small industries at hand, regardless of the strategic positioning. In this sense, in relation to the variable “E1-Return on investment analysis”, the mean rank values for the two groups of companies were 46.75 for Group 1 – Differentiation and reached 40.15 in Group 2 – Costs. The hypothesis test showed a Z statistic equal to – 1.2433 with a significance level of 0.2138. This result indicates the acceptance of the null hypothesis (H0) and the rejection of the alternative hypothesis (H1), which recommends considering that the means of the two groups are similar. Similar results were also found in relation to the “E1-Absorption costing” practices (with Z = – 0.8215 and Sig.

= 0.4113), “E1-Direct costing” ( $Z = -0.7085$  and  $\text{Sig.} = 0.4786$ ), “E1-Standard costing” ( $Z = -1.4232$  and  $\text{Sig.} = 0.1547$ ) and “E1-Variable costing” ( $Z = -1.1956$  and  $\text{Sig.} = 0.2319$ ).

When covering the second stage management practices, it was found that, in relation to the variable “E2-CVP analysis”, the mean rank values for the two groups of companies were 47.42 for Group 1 – Differentiation and reached 38.85 within the scope of Group 2 – Costs. In addition, the hypothesis test presented a Z statistic equal to  $-1.6207$ , with a significance level of 0.1051. Thus, it is appropriate then to accept the null hypothesis ( $H_0$ ), which considers that the means of the two groups are similar. Similar results were also found in the case of the “E2-Analysis of present value” practices (with  $Z = -1.7308$  and  $\text{Sig.} = 0.0835$ ), “E2-Performance evaluation” ( $Z = -1.3207$  and  $\text{Sig.} = 0.1866$ ), “E2-Internal controls for asset protection” ( $Z = -0.5607$  and  $\text{Sig.} = 0.5750$ ), “E2-Transfer price” ( $Z = -0.5266$  and  $\text{Sig.} = 0.5985$ ), “E2-Capital budget” ( $Z = -1.4476$  and  $\text{Sig.} = 0.1477$ ) and “E2-Operating budget” ( $Z = -0.8455$  and  $\text{Sig.} = 0.3978$ ). However, it was only in the case of the variable “E2-Tax planning” that a level of significance was found ( $\text{Sig.} = 0.0100$ ), enough to reject the null hypothesis and accept the fact that there is a difference between the two groups covered.

When the third stage management practices were analyzed, in the case of the “E3-Analysis of outsourcing”, it remained evident that the mean rank values for the two groups of companies were 45.40 for Group 1 – Differentiation and reached 42.77 within the scope of Group 2 – Costs. Regarding the hypothesis test, it presented a Z statistic equal to  $-0.4727$ , with a significance level of 0.6364. Therefore, it indicates that it is necessary to accept the null hypothesis ( $H_0$ ) and suggests that the means of the two groups are statistically similar. This same conclusion applies in relation to the “E3-Open book accounting” practices (with  $Z = -1.2367$  and  $\text{Sig.} = 0.2162$ ), “E3-ABC/TDABC Costing” ( $Z = 0.6837$  and  $\text{Sig.} = 0.4941$ ), “E3-Kaizen costing” ( $Z = -0.2190$  and  $\text{Sig.} = 0.8267$ ) and “E3-Goal costing” ( $Z = -1.8251$  and  $\text{Sig.} = 0.0680$ ).

Finally, when evaluating the statistical test results of the fourth stage management practices, with regard to the practice “E4-Analysis of the value chain” it was found that the mean rank values for the two groups of companies were 48.08 for Group 1 – Differentiation and reached 37.58 within Group 2 – Costs. The hypothesis test showed a Z statistic equal to  $-1.8902$ , with a significance level of 0.0587. This result indicates the acceptance of the null hypothesis ( $H_0$ ) and the rejection of the alternative hypothesis ( $H_1$ ), which recommends considering that the means of the two groups are similar. A similar result was also obtained in relation to the “E4-Balanced scorecard” practices (with  $Z = -0.9540$  and  $\text{Sig.} = 0.3401$ ), “E4-Value-based management” ( $Z = -0.8915$  and  $\text{Sig.} = 0.3727$ ), “E4-Cost interorganizational management” ( $Z = -0.9169$  and  $\text{Sig.} = 0.3592$ ), “E4-Economic management system (GECON)” ( $Z = -0.4034$  and  $\text{Sig.} = 0.6867$ ), “E4-Theory of Constraints (TOC)” ( $Z = -1.4372$  and  $\text{Sig.} = 0.1507$ ) and “E4-Economic Value Added (EVA)” ( $Z = -1.7283$  and  $\text{Sig.} = 0.0839$ ). However, it was only in the case of the variable “E4-Key performance indicators (KPIs)” that a level of significance was found ( $\text{Sig.} = 0.0387$ ), strong enough to reject the null hypothesis and accept the fact that there is a difference between the two groups covered.

#### **4.5 Analysis and collation of results**

The levels of use by stages, with priority for the practices of the first and second stages (as verified in this study), are in line with results from previous research. In this sense, Almeida and Callado (2018) comment that the Management Accounting literature signals the predominance of traditional management accounting practices, to the detriment of those considered advanced, as found in the studies of management accounting by Chenhall and Langfield-Smith (1998) in Australia, Joshi (2001) in India, Sulaiman, Ahmad and Alwi (2004) in Asian countries, Abdel-Kader and Luther (2006) in the United Kingdom and Pavlatos and Paggios (2009) in Greece. The same for

the case reported by Almeida and Callado (2018), where a printing company in the Brazilian state of Paraíba has also prioritized the use of practices associated with the first and second stages.

Similarly, when researching 23 industries from the Brazilian state of Paraná with the purpose of investigating whether the adoption of management accounting practices would be affected by contingency factors, Klein and Almeida (2017) have deduced that there is greater use of traditional management instruments at the expense of more sophisticated techniques that are part of more evolved stages. In turn, Panosso, Camanho, Espejo and Abbas (2017) have concluded that the tools with the highest level of use by 149 industrial companies affiliated to the Federation of Industries of the Brazilian State of Paraná (FIEP) are “operating budget” and “profitability analysis”, which also fall into IFAC’s (1998) second stage.

As for the research by Junqueira et al. (2016), which approached the topic in a more similar way to the focus chosen in this research, it is worth mentioning that it investigated the effect of choosing the generic competition strategy and the management control systems (MCS) on the organizational performance of 73 medium- and large-sized companies located in the Brazilian state of Espírito Santo, with the Contingency Theory as a theoretical support platform. In the part that relates the use of managerial instruments for performance evaluation, they have concluded that companies that choose the differentiation strategy adopt more contemporary management control practices, while in those that opt for the low cost strategy there is a predominance of traditional practices. They also add that this result indicates that companies that choose the differentiation positioning demand management tools with broader scopes and focused on planning, which is in line with Van der Stede (2000) and Chenhall (2003).

In order to explain this result, Junqueira et al. (2016) suggest the possibility that the differentiation strategies characteristics require a more flexible structure of administrative controls, which forces companies that operate based on this strategic position to use mainly more modern tools. On the other hand, when considering the adopters of the low cost positioning, such research has shown that the MCS has another configuration, consisting mainly of traditional tools, which focus more on operational control. Therefore, these authors argue that the sample companies’ strategic choices can be considered as one of the contingent factors influencing the MCS design.

The strategic position influence verified by Junqueira et al. (2016) contradicts the result from the Mann–Whitney U test applied to the context of the 88 small factories in this research. In this sense, among the 26 managerial practices mentioned, only in the cases of “tax planning” (Stage 2) and of the “key performance indicators (KPIs)” (Stage 4) there was a statistical indication in terms that there was a difference in levels of use between the two groups of small manufacturing companies ramified as to the strategic positioning type. In the other 24 practices, it was evident that there would be no influence of the chosen strategic positioning on the level of use, leading to acceptance of the null hypothesis.

It is worth mentioning the disparate contexts of these two surveys, as the first took into account 73 medium- and large-sized Espírito Santo companies, while the study reported here is limited to the 88 small factories in one of the micro-regions of the southern Brazilian state of Santa Catarina. The disparity in size of the two sets of companies used in these two investigations is probably the factor that weighs the most in this distinction, especially since large companies have more (human and financial) resources to adopt more sophisticated management practices.

## **5 FINAL CONSIDERATIONS**

The objective of this study was to identify the influence of strategic positioning on the adoption of financial management tools in the context of small industries in the AMUREL (Brazilian Portuguese abbreviation for the Laguna Region Municipalities Association) micro-region

and, additionally, to find an answer to the hypothesis about the possibility that the level of use of financial management practices is equal in small companies regardless of strategic positioning adopted.

In this sense, the authors consider that such purpose has been achieved because the answers tabulation allowed to know the most used management practices as well as to obtain a statistical indication in order to accept the hypothesis that there would be no influence of the chosen strategic position on the level of use of these practices.

As for the most relevant results, in addition to the characteristics of the companies at hand, the following aspects should be highlighted:

- a) The management practices of the first and second stages are the most used (with an average of 55.91% and 69.32%, respectively) when compared with the instruments belonging to the third (40%) and fourth stages (44.46%). This result is consistent with previous research that attests to a higher rate of use of practices considered traditional, to the detriment of more recent ones.
- b) The research hypothesis that believed there was no interference from the strategic positioning in the level of use of the researched management practices was accepted. In this sense, the two sample groups (segmented as to the adoption of generic strategies “differentiation” and “low costs”) have shown similar averages, from the statistical point of view by the Mann–Whitney U test, in 24 of the 26 practices considered. This result partially contradicts the research by Junqueira et al. (2016), who found that the strategy adopted has influenced the level of use of certain performance evaluation metrics.

Regarding the research contributions, it is pertinent to highlight the possibility of knowing the context of small manufacturing companies in a micro-region in the south of the state of Santa Catarina in terms of prioritized management practices and, in addition, to point out statistical evidence that the strategic positioning chosen by these small industries does not affect the level of use of the financial practices mentioned in this business context.

Regarding the research limitations, two aspects should be mentioned. The first one refers to the peculiarity of using a standardized questionnaire, the questions of which can lead to wrong interpretations by respondents. In other words, the responses obtained from the covered companies’ internal controls were not checked/triangulated, assuming that the responses collected express these companies’ administrative context. The second aspect concerns the sample size used, since the 88 small industries studied were those whose respondents agreed to participate. Thus, a priori, it must be assumed that the results derived cannot be extrapolated to other business or regional contexts.

As recommendations for future studies, it would be interesting to expand the number of companies involved and apply similar research to include small companies from other regions of the country (or from other countries) in order to compare the results on a more homogeneous basis.

## **REFERENCES**

- Abdel Al, S. F., & McLellan, J. D. (2013). Strategy and management accounting practices alignment and its effects on organizational performance. *Journal of Accounting Business and Management*, 20(1), 1-27.
- Abdel-Kader, M., & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British Food Journal*, 108(5), 36-357.

- Abdel-Kader, M., & Luther, R. (2008). The impact of firm characteristics on management accounting practices: a UK-based empirical analysis. *The British Accounting Review*, 40(1), 2-27.
- Ahmad, K. (2014). The adoption of management accounting practices in Malaysian small and medium size enterprises. *Asian Social Science*, 7(2), 236-249.
- Almeida, K. K. N., & Callado, A. A. C. (2018). Relação entre o poder do cliente e práticas de contabilidade gerencial. *Revista Gestão Organizacional – RGO*, 11(2), 61-78.
- Almeida, F. M. de, Valadares, J. L., & Sediyaama, G. A. (2017). A contribuição do empreendedorismo para o crescimento econômico dos estados brasileiros. *Revista de Empreendedorismo e Gestão de Pequenas Empresas*, 6(3), 466-494.
- Andrade, M. M. de. (2002). *Como preparar trabalhos para cursos de pós-graduação: noções práticas* (5a ed.). São Paulo: Atlas.
- Beuren, I. M., & Fiorentin, M. (2014). Influência de fatores contingenciais nos atributos do sistema de contabilidade gerencial: um estudo em empresas têxteis do Estado do Rio Grande do Sul. *Revista de Ciências da Administração*, 16(38), 196-212.
- Bruni, A. L. (2012). *SPSS: guia prático para pesquisadores*. São Paulo: Atlas.
- Callado, A. A. C. (2016). Relações entre o número de indicadores de desempenho utilizados e fatores contingenciais: evidências do contexto de uma cadeia agroalimentar de suprimentos. *Revista Contabilidade Vista & Revista*, 27(2), 48-63.
- Castro, J. A. F. (2015). Contingency factors that influence the design of organizational structure. *Journal of Business*, 2(2), 38-56.
- Chenhall, R. H., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: an Australian study. *Management Accounting Research*, 9(1), 1-19.
- Chenhall, R. H., & Chapman, C. S. (2006). Theorising and testing fit in contingency research on management control systems. In Z. Hoque (ed.). *Methodological issues in accounting research: theories, methods and issues* (pp. 35-52). London: Spiramus Press.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2-3), 127-168.
- Chenhall, R. H. (2006). Theorizing contingencies in management control systems research. In C. S. Chapman, A. G. Hopwood, & M. D. Shields (org.). *Handbooks of Management Accounting Research*, 1 (pp. 263-205), London: Elsevier.
- Dalchiavon, A., Wernke, R., & Zanin, A. (2017). Práticas de controladoria utilizadas em cooperativa central de crédito: estudo de caso. *Revista de Gestão e Organizações Cooperativas – RGC*, 4(8), 13-32.

- Dalmoro, M., & Vieira, K. M. (2013). Dilemas na construção de escalas tipo Likert: o número de itens e a disposição influenciam nos resultados? *Revista Gestão Organizacional – RGO*, 6(ed. especial), 161-174.
- Donaldson, L. (2012). Teoria da contingência estrutural. In S. R. Clegg, C. Hardy, & W. R. Nord, *Handbook de estudos organizacionais*. São Paulo: Atlas.
- Donaldson, L. (2001). *The contingency theory of organizations*. London: Sage.
- Gil, A. C. (2010). *Métodos e técnicas de pesquisa social*. São Paulo: Atlas.
- Honorio, F. M. M., & Bonemberger, S. Z. (2019). Aplicação de ferramentas de apoio gerencial contábil em uma microempresa de confecções. *Revista de Empreendedorismo e Gestão de Pequenas Empresas*, 8(1), 201-218.
- International Federation of Accountants. (1998). *International Management Accounting Practice Statement: Management Accounting Concepts*. New York.
- Jordão, R. V. D., & Souza, A. A. (2013). Aquisição de empresas como fator de mudança no sistema de controle gerencial: uma análise estratégica sob a perspectiva da Teoria Contingencial. *Revista Universo Contábil*, 9(3), 75-103.
- Joshi, P. L. (2001). The international diffusion of new management accounting practices: the case of India. *Journal of International Accounting, Auditing & Taxation*, 10(1), 85-109.
- Junqueira, E., Dutra E. V., Zanquetto Filho, H., & Gonzaga, R. P. (2016). Efeito das escolhas estratégicas e dos sistemas de controle gerencial no desempenho organizacional. *Revista Contabilidade & Finanças*, 27(72), 334-348.
- Klein, L., & Almeida, L. B. de. (2017). A influência dos fatores contingenciais na adoção de práticas de contabilidade gerencial nas indústrias paraenses. *Revista Universo Contábil*, 13(3), 90-119.
- Lavarda, C. E. F., & Gorla, M. C. (2012). Estudo bibliométrico sobre a teoria contingencial aplicada à pesquisa orçamentária. *Anais do Congresso USP de Controladoria e Contabilidade*, São Paulo, SP, Brasil, 12.
- Leite, E. G. (2013). *Adoção de práticas de controladoria por empresas atuantes no Brasil: um estudo sob a ótica da teoria da contingência*. Dissertação Mestrado em Controladoria e Finanças, Universidade do Vale do Rio dos Sinos, São Leopoldo, RS, Brasil.
- Leite, E. G., Diehl, C. A., & Manvailer, R. H. M. (2015). Práticas de controladoria, desempenho e fatores contingenciais: um estudo em empresas atuantes no Brasil. *Revista Universo Contábil*, 11(2), 85-107.
- Maletic, D., Maletic, M., Al-Najjar, B., Gotzamani, K., Gianni, M., Kalinowski, T., Gomiscek, B. (2017). Contingency factors influencing implementation of physical asset management practices. *Organizacija*, 50(1), 3-16.

- Malik, K., & Jasinska-Biliczak, A. (2018). Innovations and other processes as identifiers of contemporary trends in the sustainable development of SMEs: the case of emerging regional economies. *Sustainability*, 10(5), 1361.
- McLellan, J. D. (2014). Management accounting theory and practice: measuring the gap in United States Business. *Journal of Accounting, Business & Management*, 21(1), 53-68.
- Mintzberg, H., Ahlstrand, B., & Lampel, J. (2010). *Safári de estratégia: um roteiro pela selva do planejamento estratégico* (2a ed.). Porto Alegre: Bookman.
- Moterle, S., Wernke, R., & Junges, I. (2019). Conhecimento sobre gestão financeira dos dirigentes de pequenas empresas do sul de Santa Catarina. *Revista de Administração, Contabilidade e Economia – RACE*, 18(1), 1-26.
- Nigri, G., & Baldo, M. (2018). Sustainability reporting and performance measurement systems: how do small-and medium-sized benefit corporations manage integration? *Sustainability*, 10(12), 1-17.
- Oro, I. M., & Lavarda, C. E. F. (2019). Interface dos sistemas de controle gerencial com a estratégia e medidas de desempenho em empresa familiar. *Revista Contabilidade e Finanças*, 30(79), 14-27.
- Otley, D. (2016). The contingency theory of management accounting and control: 1980-2014. *Management Accounting Research*, 31(june), 45-62.
- Panosso, A., Camanho, R. R., Espejo, M. M. dos S. B., & Abbas, K. (2017). Influência das ferramentas de controle gerencial no desempenho: estudo empírico em empresas industriais paranaenses. *Enfoque: Reflexão Contábil*, 36(2), 1-17.
- Pavlatos, O., & Paggios, I. (2009). Management accounting practices in the Greek hospitality industry. *Managerial Auditing Journal*, 24(1), 81-98.
- Porter, M. (1991). *Estratégia competitiva: técnicas para análise de indústrias e da concorrência* (8a ed.). Rio de Janeiro: Campus.
- Rauen, F. (2015). *Roteiros de iniciação científica: os primeiros passos da pesquisa científica desde a concepção até a produção e a apresentação*. Palhoça: Editora Unisul.
- Richardson, R. J. (1999). *Pesquisa social: métodos e técnicas*. São Paulo: Atlas.
- Rufatto, I. (2018). *Níveis de utilização e de importância das práticas de controladoria adotadas por cooperativas agrícolas paranaenses*. 2018. Dissertação Mestrado em Ciências Contábeis e Administração, Universidade Comunitária da Região de Chapecó, Chapecó, SC, Brasil.
- Santos, V., Dorow, D. R., & Beuren, I. M. (2016). Práticas gerenciais de micro e pequenas empresas. *Revista Ambiente Contábil*, 8(1), 153-186.

- Santos, V., Corrêa, N. L., Beuren, I. M., & Gomes, T. (2019). Relação entre ciclo de vida organizacional e uso de instrumentos de contabilidade gerencial. *Enfoque: Reflexão Contábil*, 39(2), 67-85.
- Scapens, R. W. (2006). Understanding management accounting practices: a personal journey. *The British Accounting Review*, 38(1), 1-30.
- Siska, L. (2016). The contingency factors affecting management accounting in czech companies. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(4), 1383-1392.
- Sulaiman, M., Ahmad, N. N. N., & Alwi, N. (2004). Management accounting practices in selected Asian countries: a review of the literature. *Managerial Auditing Journal*, 19(4), 493-508.
- Triola, M. F. (2005). *Introdução à estatística* (9a ed.). Rio de Janeiro: LTC.
- Van Der Stede, W. A. (2000). The relationship between two consequences of budgetary controls: budgetary slack creation and managerial short-term orientation. *Accounting, Organizations and Society*, 25(6), 609-622.
- Valeriano, C. E. B. (2012). *Ciclo de vida organizacional e artefatos de contabilidade gerencial: uma investigação nas 250 pequenas e médias empresas que mais cresceram no Brasil entre 2008 e 2010*. Dissertação Mestrado em Contabilidade, Universidade de São Paulo, São Paulo, SP, Brasil.