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# **Strategy Disclosure in the Annual Reports of Brazilian Companies**

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## **Summary**

In this study we describe how listed Brazilian companies disclose information about their strategy in annual reports. From the literature on operations strategy, we developed eight proxies and their respective keywords for strategy disclosure. Keyword frequencies were measured using an automatic procedure. We used cluster analysis to identify strategic groups and multinomial logistic regression to discriminate the groups using economic performance variables. From a sample of 450 annual reports, we obtained four groups of companies. Only two of them have clearly defined strategic positioning. We concluded that the quality of strategy disclosure offered by Brazilian companies is low.

## **1 – Introduction**

Despite its relevance for investors, the disclosure of a company's strategy may represent a cost, as it can potentially reveal proprietary information. In this sense, companies have to choose to what extent they want to reveal their strategy. On the one hand, investment analysts and individual or institutional investors need information to evaluate a company's potential for generating value. On the other hand, competitors may benefit from information disclosed and anticipate a company's strategic moves.

This study aimed to investigate the disclosure of strategic information in the annual reports of companies listed on the São Paulo Stock Exchange (BOVESPA). We found only one previous study focused on the disclosure of strategic information. Santema & Van de Rijt (2001) analyzed Dutch companies' annual reports and found that companies provided little information about their goals, plans or future actions.

We offer two contributions to the literature. First, we introduce eight dimensions derived from the literature on operations strategy to analyze strategy disclosure in annual reports. Second, we have developed a process to quantify strategy disclosure by means of computerized thematic content analysis.

The resulting process allowed us to describe how listed Brazilian companies disclose information about their strategies in eight dimensions, namely: product cost; operational process cost; quality compliance; design for quality; volume flexibility; product mix flexibility; new product launch speed; and new product development speed.

To assess the robustness of our process for strategy disclosure quantification, we used cluster analysis to identify strategic groups. We used keyword frequencies for the eight strategy disclosure dimensions mentioned. We also applied multinomial logistic regression to discriminate the identified groups relative to their economic performance, according to the

propositions of Ward & Duray (2000), who stated that there is a positive relationship between a firm's strategic orientation for quality and its performance.

The results obtained allowed identification of two groups with a clear-cut strategic positioning, one competing through low cost and another through consistent quality. A third group presents an inclination towards differentiation, although without a clearly identifiable positioning. And a fourth group was identified, formed by companies that do not disclose their competitive strategy in annual reports.

The robustness of the procedure introduced here is reinforced by the fact that the groups identified by means of the measures of strategic disclosure match those theoretically foreseen by the literature. Additionally, the analysis using observable performance variables confirmed the results obtained in previous studies that relate competitive positioning through an emphasis on quality to superior economic performance.

## **2 – Strategy disclosure in corporate annual reports**

Studies on disclosure using annual reports have been motivated by the importance of this instrument in communicating the financial performance of companies and in the reduction of information asymmetry, bringing together common interests of stakeholders and managers (Arrows, 1984; Beretta & Bozzolan, 2008).

The complex (Healy & Palepu, 2001) and multifarious (Beattie et al., 2004) nature of disclosure quality has prompted a number of studies about effective ways to establish guidelines for its evaluation (Beattie et al., 2004; Beretta & Bozzolan, 2008).

Santema and Van de Rijt (2001) analyzed Dutch companies' annual reports and found that their strategy disclosure quality was poor, providing little information about goals, plans or future actions. Santema, Hoekert, Van de Rijt and Van Oijen (2005) examined the influence of national differences, corporate governance and culture on the extent of strategy disclosure. Narrative sections of annual reports of a hundred companies in the United

Kingdom, France, Germany, Poland and the Netherlands were analyzed and the results indicated that national differences do influence the extent to which firms disclose strategies in their annual reports.

### **3 – Strategy**

Strategy is an administrative technique to achieve results consistent with the mission and goals of the organization (Wright, Kroll & Parnell, 1998). To be effective, strategy must be clear, focused and should define the competitive priorities adopted by a company (Skinner, 1969).

The present study is based on the proposition that strategy comprises a set of actions taken and also the procedures whereby the actions are implemented (Chaffee, 1985). Using Porter's generic competitive strategy as a starting point, Thompson & Strickland (2000) identified five competitive stances. The first is low-cost orientation, which seeks to minimize the general cost of products and services in order to attract a wide range of buyers. The second uses a strategy of major differentiation, in which companies seek to make it easy to distinguish between their products and those of competitors. The third is the strategic positioning of a supplier offering the best cost, where a company seeks to offer its clients the best value for their money. It combines an emphasis on low cost with differentiation. The fourth strategic position is that of market niche combined with low costs. The fifth and last type is the strategy of focus or market niche based on differentiation.

Functional strategies are assumed to support the overall business strategy and operate as a competitive tool for a company (Slack, Chambers & Johnston, 2007). The present work will tackle operational functional strategy – also known as manufacturing or production strategy.

Schroeder (1986) postulated that production strategy is a particular vision of the production function that takes overall directions into consideration. The production strategy

should result in a consistent pattern of decisions for production and competitive advantage for the organization. The manufacturing strategy should establish production techniques, physical arrangements and types of industrial plants, machinery and equipment that fulfill the needs of efficient production (Skinner, 1969).

The following section discusses competitive priorities and the dimensions of operations strategy.

#### 4 – Operations strategy dimensions and competitive priorities

With support from the literature review, we adopted in the present study a division of operations strategy concepts in four constructs: cost, quality, flexibility and speed (White, 1996; Ward et al., 1998; Noble, 1995). Table 1 lists authors and presents in greater detail these four dimensions.

**Table 1: Summary of competitive priorities mapped in the literature**

<b>AUTHOR</b>	<b>SUMMARY</b>
<b>COST</b>	
Slack et al. (2007)	Prices of goods lower than those charged by the competition.
Noble (1995)	Reduction of manufacturing costs. focus on inventory control. just-in-time production. improvements in production processes. reduced rework and losses. tight integration of the production chain. elimination of delays. search and use of substitute raw materials.
Garvin (1993)	Low operating, maintenance and start-up costs.
Ward et al. (1998)	Production scale and productivity. improvements in the production process aiming to cut costs. increased use of equipment. increased use of total installed capacity. and inventory reduction.
<b>QUALITY</b>	
Porter (1980)	A product or service that meets or even exceeds customer expectations.
Porter (1980)	Higher and differentiated quality.
Slack et al. (2007) Ward et al. (1998)	Compliance
Flyn et al. (1994)	Process control and process management.
Garvin (1987)	Multidimensional: performance, product attribute, reliability, conformity, durability and quality of service, aesthetics and perceived quality.
Ward et al. (1998)	Performance, product attribute, reliability, conformity, durability and service quality.
Noble, 1995	Product-wise: compliance, number of functionalities, aesthetics, quality assurance, ergonomics, diversity, autonomy and consumption, performance. Process-wise: low percentage of rework, strength of quality control, warranty functioning of manufacturing plants.
Sweeney et al. (1991)	High yield from input materials and little waste.
Ward & Duray (2000)	Emphasis on statistical process control. updated process equipment and development of new processes for new and existing products.

**FLEXIBILITY**

Slack et al. (2007)	Ability to promptly modify the company's operations (what, how and when).
Noble (1995)	Product mix and flexibility of design. customization, flexibility of production rate and volume.
	Production process: customization of products, frequent variations in production levels, need to reduce production cycle to increase the volume and/or variety of products.
Ward et al. (1998)	Product mix, volume, change over and modification.
Gerwin (1985)	Product mix, volume, change over and modification, rerouting, material and sequencing.

**SPEED**

Slack et al. (2007) Sweeney (1991)	Reduce the time between customer order and the delivery of goods, both in the production process and delivery.
Ward & Duray (2000)	Customer focus: delivery time, time of customer service, reliability of delivery (on-time delivery), meeting deadlines.
Ward et al. (1998)	Development time for new products, delivery time, on-time delivery, reduced time in production and production cycle.
Noble (1995)	Reduction of inventory and risks (wrong predictions, obsolescence).

**5 – Methodology**

We developed a process to approximate strategy disclosure based on thematic content analysis, using indicators of a semantic nature. Content analysis has been frequently used in disclosure research (Jones & Shoemaker, 1994; O'Connor & Amir, 1996; Bryan, 1997; Smith & Taffler, 2000).

The themes, here called dimensions or strategy constructs, are the units to be encoded. The theme is the unit of meaning that naturally emerges from a text parsed according to certain criteria concerning the theory that serves as a guide to reading (Bardin, 2004). The author also suggested that previous studies are the likely sources of inspiration for the definition of thematic analysis grids. The themes encompassing the constructs of strategy, as well as their respective word grids, are described in the following sections.

A set of keywords was defined for each of the eight strategy constructs. The keywords derived from the literature on operations strategy and from a detailed analysis of all terms in annual reports. We tallied the frequency with which words for each thematic grouping appeared in each text, as long as this appearance was clearly related to information about a company's strategy.

## **5.1 – Constructs of competitive operations strategy**

The four operations strategy constructs selected from the literature were: differentiation by cost, differentiation by quality, differentiation by flexibility and differentiation by speed (White 1996, Ward et al., 1998; Noble 1995).

We also noted that authors such as Ward & McCreery (1998), Garvin (1993), Shawnee & Vickery (1994), Ward, Bickford & Leong (1995), Ward & McCreery (1998) and Frohlich & Dixon (2001) subdivided competitive operations strategies into several competitive capacities, allowing subdividing these four strategies in eight categories. These eight resulting constructs can be defined as:

- Low product cost (PDC),
- Low process cost (PRC),
- Differentiation by quality of design (QOD),
- Differentiation by quality of conformity (QOC),
- Differentiation by flexibility of design (DFB),
- Differentiation by flexibility of volume (VOF),
- Differentiation by speed of distribution (SPD) and
- Differentiation by speed of development and launch of new products (SPL).

## **5.2 – Keywords**

The literature review allowed us to identify keywords related to each pre-defined competitive operations strategy dimension. The keywords formed the basis for the elaboration of a standard table for individual analysis of each annual report. Reasons of space prevent the presentation here of all the keywords used in the content analysis procedure, but they are available upon request to the authors.

To expedite the search of the annual reports, we developed a computer program to count the frequency of exact words (with more than four characters), using a simple logic and the Python language. The Python programming language is an-open source language developed and maintained by the Python Software Foundation, a non-profit entity.

The program performs search by proximity of keywords and pre-defined complements. The count was scored when the complement occurred up to three words after the keyword without being separated by punctuation marks like full stops, colons, exclamation and question marks. For example: "Automation made possible significant and important reduction in the cost of certain production processes ..." In this case, a hit was recorded for the pre-defined compound word "reduction&cost&process", associated with the dimension of process cost competitive strategy, because they are found up to three words apart in the same sentence.

This parameter is adjustable, but several tests, using a sub-sample of thirty annual reports, revealed that this distance gives the best results. Distances of less than three words failed to capture several evidence and distances exceeding three words led to incorrect associations.

### **5.3 – Cluster analysis**

The thematic content analysis generated the frequency of simple and compound keywords associated with each strategy construct. With these measures at hand, we developed variables based on the observed frequencies for the eight constructs of operations strategy. Then we applied a sequence of hierarchical and non-hierarchical clustering procedures to the variables, in order to identify groups with distinct strategic orientation within the 450 annual reports analyzed

The groups were defined by analysis of the incremental variation of the agglomeration coefficient (Ketchen & School, 1996). The resulting dendograms, which are tree-like graphical representations of the hierarchical procedure results, were also examined.

We employed two of many possible procedures for validation of grouping to ascertain the reliability and effectiveness of the results. First, the data were randomly separated into two groups, forming new separate collations, and these groups were compared. Afterwards, variables were randomly deleted, the agglomeration method was once again applied to the remaining ones, and the results were compared (Malhotra, 2001).

#### 5.4 – Multinomial logistic regression

After defining groups with distinct strategic orientation, we used multinomial logit regression to discriminate groups according to economic performance variables. The multinomial logit model corresponds to the simultaneous estimation of binary logit models involving all possible comparisons between categories (Long, 2001). Formally, the model is written as (Long, 2001):

$$\ln \Omega_{m|b}(x) = \ln \frac{\Pr(y = m|x)}{\Pr(y = b|x)} = x\beta_{m|b}, \quad \text{for } m = 1 \text{ to } J \quad (1)$$

In equation (1),  $b$  is the base category or comparison group. The beta coefficient of the base category is zero, as it represents the logarithm of the probability of that category's occurrence in relation to itself. In the same equation,  $x$  represents one of the independent variables selected to discriminate groups. The result for the model is (Long, 2001):

$$\Pr(y = m|x) = \frac{\exp(x\beta_{m|b})}{\sum_{j=1}^J \exp(x\beta_{j|b})} \quad (2)$$

Equation (2) returns the probability that any given element  $y$  belongs to category  $m$ , given a value of  $x$ , in relation to base category  $b$ . Statistical software packages typically select the most numerous as the base category, but the user can change this specification.

The multinomial logistic model was applied using the groups obtained (numbered 1 to 4) as the dependent variable, against the performance variables net margin (NM), gross margin (GM), return on assets (ROA) and total assets (TA).

## 6 – Results

Of the 543 annual reports analyzed, 123 displayed no operations strategy disclosure, or in other words the total sum of captured keywords was equal to zero. We noted that the bigger the report, the greater the likelihood of capturing more instances of disclosure. To minimize the interference of report size on the extent of company disclosure captured by the procedure, we divided the keyword frequency by the report size in kilobytes (KB). In .txt format, the kilobyte value has a direct positive relationship with text size. The keyword frequency per KB was subsequently converted to keywords per report page (keywords/page).

As Clatworthy & Jones (2001) pointed out, annual reports containing less than 300 words are not very representative, and can thus be excluded from the sample. Therefore, we discarded 83 reports with less than 300 words, reducing the sample to 460 companies.

Furthermore, to reduce interference caused by the presence of outliers, results more than three standard deviations from the mean were excluded, resulting in the deletion of an additional ten companies that presented averages in excess of 5,292 KW/KB. The final data set thus comprised 450 companies. Table 1 shows the descriptive statistics in terms of keyword frequency per report page for the 450 companies analyzed.

**Table 1: Descriptive statistics for strategy disclosure in 450 annual reports**

Strategic dimension	PDC	PRC	QOD	QOC	DFB	VOF	SPD	SPL
Average (keyword/page)	0.049	0.499	0.041	0.396	0.109	0.057	0.127	0.162

<b>% of total</b>	3.41%	34.62%	2.87%	27.48%	7.58%	3.93%	8.85%	11.25%
<b>Minimum (keyword/page)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Maximum (keyword/page)</b>	2.000	4.000	1.000	2.800	1.720	1.160	1.780	1.800
<b>Std. deviation (keyword/page)</b>	0.143	0.568	0.099	0.477	0.205	0.120	0.242	0.256

Legend: PDC = low product cost; PRC = low process cost; QOD = differentiation by quality of design; QOC = differentiation by quality of conformity; DFB = differentiation by flexibility of design; VOF = differentiation by flexibility of volume; SPD = differentiation by speed of distribution; SPL = differentiation by speed of development and launch of new products.

It can be observed that listed Brazilian companies reveal information about strategy in their annual reports primarily regarding the process cost and quality of conformity dimensions (PRC and QOC). These two dimensions represent together more than 62% of all strategy disclosures.

The much lower frequency presented in the product cost dimension probably occurs due to the difficulty in specifying information in this dimension. Diversified companies, with many product lines, would have to mention details specific to each of these lines. In addition to the cost of obtaining such information, it would also result in disclosure of proprietary information, something which is not expected to occur (Dye, 1986).

The following section deals with the results of the cluster analysis and the identification of strategic positioning among groups.

### **6.1 – Cluster analysis and strategic positioning**

The groups obtained through non-hierarchical algorithms (k-medians and k-means clustering methods) turned out very similar to those obtained through hierarchical algorithms (Ward method). This similarity in results strengthens the validity of the group formations obtained (Ketchen & Schook, 1996).

Malhotra (2001) pointed out that the definition of the number of groups or clusters to be used should be a decision made by the researcher according to criteria of degree of

representation of the groups formed and identification of internal homogeneity and external heterogeneity. Thus, we organized the 450 companies into four groups, presented in Table 2:

**Table 2: Frequency of keywords per page for the eight strategic dimensions in groups**

		Strategic Dimensions								
Group	N	PDC	PRC	QOD	QOC	DFB	VOF	SPD	SPL	Total
1	48	0.115	1.686	0.068	0.435	0.119	0.104	0.135	0.159	2.821
2	40	0.088	0.875	0.051	1.500	0.130	0.083	0.186	0.253	3.164
3	163	0.056	0.541	0.070	0.487	0.165	0.074	0.165	0.234	1.792
4	199	0.020	0.102	0.009	0.091	0.057	0.026	0.083	0.086	0.474

Legend: PDC = low product cost; PRC = low process cost; QOD = differentiation by quality of design; QOC = differentiation by quality of conformity; DFB = differentiation by flexibility of *design*; VOF = differentiation by flexibility of volume; SPD = differentiation by speed of distribution; SPL = differentiation by speed of development and launch of new products.

It can be observed that Group 4 is the most numerous, comprising 199 companies. Companies in this group exhibit less than half a keyword related to strategy per page. The other groups present significantly higher frequencies of keywords per page.

Group 1, comprising 48 companies (10.67%), has strong emphasis on meeting market demands, without losing sight of their priority, the lowest price. It is the group with the second largest keyword frequency per page (2.82), mainly concentrated in the process cost and quality of conformity dimensions. Keywords associated with low process cost (PRC) appear more frequently in the reports of Group 1 companies.

We infer that companies in Group 1 place emphasis on the low cost of their products, in order to increase margins or to offer customers more value for their money than the competition. It appears that even in this low-cost group, differentiation by quality of conformity (QOC) is mentioned in the reports and therefore not neglected, as it is deemed essential for the market survival of businesses (Noble, 1996).

Those are businesses that fit the strategic group of low-cost leadership and seek to keep a low general cost for their products and services in order to attract a wider range of buyers (Thompson & Strickland, 2000). Frohlich & Dixon (2001) labeled these companies as

*caretakers*, which are organizations seeking cost reductions as a way to offer products at a low price while achieving high quality and reliable delivery.

Porter (1985) proposed that the low-price strategy is typical of only a small number of enterprises, but that once implemented becomes a powerful source of competitive strategy. According to Porter (1985), in this type of lowest price strategy there is not enough room for everyone, but only for the few most competent in that aspect. As a result, most companies seek a place in the market competing through differentiation or focus.

Group 2 is formed of 40 companies (8.89% of the total), showing the highest average disclosure levels, with 3,164 keywords per report page. In general, this group is formed of companies seeking high differentiation by quality of conformity (QOC), but also concerned with costs (PRC). These companies are regarded as geared towards strategies of quality differentiation, flexibility and speed, and seek to differentiate their products in respect to that of competitors' to attract a wide range of customers or even specific niches (Thompson & Strickland, 2000). This is the group of marketers or designers, which offer products differentiated under various aspects, as a way to add value recognizable by the customer, striving for rapid development of new products (Frohlich & Dixon, 2001).

Group 3, consisting of 163 companies (36.22% of the total), contains a large number of enterprises relying on multiple types of manufacturing strategies. The disclosure of information about quality of conformity (QOC) and process cost (PRC) predominates in this group, though at lower levels than those present in businesses belonging to Groups 1 and 2 (differences were significant at 1%). The single dimension where Group 3 companies show greater disclosure levels than the other groups is that of design flexibility (DFB) (significant at 1% when compared to the frequency of Group 2).

Companies in Group 3 show comparatively high levels of disclosure in the dimensions of quality of design (QOD), flexibility of volume (VOF), speed of distribution (SPD) and

speed of development and launch of new products (SPL). However, levels of disclosure for these dimensions were much lower than those found for the process cost (PRC) and quality of conformity (QOC) dimensions.

We infer that companies in Group 3 seek to obtain competitive advantages in multiple dimensions, without reliance on any specific strategic positioning. Porter (1985) and Noble (1996) claimed that greater sustainable competitive advantage can be achieved by using many different operations strategies, originating from multiple sources, instead of relying on just one or two factors. Porter (1985) also suggested that there is no limit restricting the number of companies competing through differentiation, because each company focuses on its own consumer audience, trying to answer their expectations in particular ways.

Finally, companies in Group 4, the most numerous with 199 enterprises (44.22%), are those that barely reveal their competitive strategies in their annual reports. The level of disclosure observed, of less than half a keyword per page, does not allow for identification of any strategic positioning by these companies. We infer that companies in Group 4 either have no definite strategic positioning or consciously choose not to inform readers of their annual reports about it. In either case the low frequency of keywords is bad news for the company, because studies about disclosure assume that rational investors will always consider that any information not disclosed by the company is of an unfavorable nature (Milgrom, 1981).

A rival hypothesis is that companies in Group 4 do not disclose information about their strategies in order not to reveal their sources of competitive advantage to the competition. This hypothesis is tested in the next section.

The analysis presented in this section allows us to infer that companies in Group 2 are those with the best economic performance. Ward and Duray (2000) observed that for high performance companies there is a direct link between competitive strategy through

differentiation, manufacturing strategy based on quality and economic performance. This hypothesis is also tested in the next section.

## 6.2 – The relationship between strategic positioning and economic performance

Table 3 shows the results for the multinomial logistic regression in which the group was assigned as the dependent variable. We regressed the group against the four performance variables: gross margin (GM), net margin (NM), return on assets (ROA) and the control variable total assets (TA). We decided in favor of including this control variable since the level of disclosure can be related to the size of a company. The correlation analysis showed no evidence of multicollinearity of the variables.

All the dependent variables were standardized in relation to their mean and standard deviation (Z standardization) to avoid problems related to different scales of variables. The interpretations refer always to variations of one standard deviation in relation to the mean.

**Table 3 - Multinomial logistic regression results**

<b>Group</b>	<b>Variable</b>	<b>Coefficient</b>	<b>Standard error</b>	<b>p-value</b>
1	Gross margin	-1.024	0.143	0.000
	Net margin	-0.117	0.123	0.344
	Total assets	-3.080	1.182	0.009
	Return on assets	2.144	1.153	0.043
	Constant	-1.563	1.521	0.304
2	Gross margin	-0.703	0.137	0.000
	Net margin	-0.124	0.130	0.339
	Total assets	-0.161	0.016	0.000
	Return on assets	3.001	1.150	0.009
	Constant	-1.311	1.598	0.412
3	Gross margin	-0.425	0.058	0.000
	Net margin	-0.154	0.162	0.341
	Total assets	-0.176	0.004	0.000
	Return on assets	2.182	1.001	0.031
	Constant	0.113	1.580	0.943
Log Pseudolikelihood = -393.64				
Pseudo R <sup>2</sup> = 0.0404				
Standard errors adjusted for four groups on the dependent variable				
Group = 4 is the base category				

Group 4 was selected as the base category. For the average values of all independent variables, the probability of any one company belonging to: Group 1 is 10.67%; Group 2 is 8.89%; Group 3 is 36.22%; and the Group 4 is 44.22%. These are the proportions originally found.

The meaning of a positive and statistically significant coefficient for a given variable is that when the value of that variable increases, so does the probability of any one company's belonging in that group. Likewise, the meaning of a negative and statistically significant coefficient for a given variable is that when the value of that variable increases, the probability of any one company's belonging in that group decreases.

One can observe in Table 3 that the coefficient for the variable net margin was not significant, for all groups, implying this variable does not allow for discrimination between groups. The variables total assets and gross margin were significant and negative at 1% in all groups. This means that when gross margin or total assets increases, the probability of any one company's being part of Groups 1, 2 or 3 decreases, when compared to that of Group 4. So companies in Group 4 are the largest and show the highest gross margin when compared to the other groups.

The coefficient of the variable return on assets is positive and statistically significant at 5% for all groups, in relation to Group 4. This means that an increase in the return on assets also increases the probability of a company's being part of Groups 1, 2 or 3, and decreases the probability of its belonging to Group 4. As the largest coefficient for the variable ROA is observed in Group 2, the increase in probability is also larger for that group when compared to Groups 1 and 3 respectively.

The results suggest that companies in Group 4 are the worst performers regarding return on assets. Thus, the lower level of disclosure shown by companies in this group is not

associated with increases in competitive advantage. On the other hand, companies in Group 2 are the best performers regarding return on assets, as expected by the analysis of their strategic positioning.

## **7 – Conclusions**

This study aimed to evaluate the quality of strategic information disclosure in the annual reports of listed Brazilian companies. We developed a procedure based on thematic content analysis to approximate measures regarding the disclosure of strategic information in corporate annual reports.

Our results suggest that the quality of strategic disclosure in annual reports can be improved significantly: 199 out of the 450 companies analyzed do not reveal information that allows inferring their strategic positioning. Moreover, these 199 companies were the ones showing the worst economic performance in the sample. Therefore, these companies do not report to investors and other stakeholders how they intend to improve their performance.

The process of approximation of strategy disclosure developed here generated encouraging results. Despite the limitations of the semi-objective approximation of strategy disclosure, which required some discretionary decision on our part, the list of keywords used in the content analysis was completely derived from the literature on strategy and validated in the sample.

The measures of disclosure in eight strategic dimensions allowed us to identify four groups of companies. The fact that the groups identified by means of their strategic orientation match the theoretical propositions found in literature increases the confidence in the process of content analysis.

The results of the multinomial logistic regression analysis further increase the confidence in the robustness of the process. Convergent with results from other studies, which were based on questionnaires, companies that showed competitive positioning with emphasis

on quality turned out to be those presenting superior economic performance in the present study.

A remaining limitation to the present study concerns the possible existence of spurious correlations between strategic positioning of the identified groups and the economic performance variables. It is usually presumed that strategic positioning involves long-term decisions and varies little over time. However, future studies could focus on longitudinal analyses with the aim of proving causation between positioning with emphasis on quality and superior performance.

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