Strategic group and financial performance in the brazilian construction sector: an empirical relationship

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Abstract

The history of the construction industry in Brazil has passed through periods of ups and downs until 2003. It is today the main player in the Brazilian economy contributing to the production chain with 8.3% in the formation of the total GDP. This paper aimed to evaluate if there is significant evidence of differences between strategic groups of Brazilian construction companies in their financial performance. Therefore, it used the theoretical support of Porter (1986) take into consideration that these strategic groups are composed of companies in the industry sector, and they are following the same or similar strategy over the strategic dimensions. The data gathering occurs in

the database of Economática Software Investments S.A., totaling 62 companies. Nevertheless, only 26 companies were part of the non-probability sampling by accessibility due to the availability of all data necessary for analysis. The variables are related to the size, return on assets (ROA) and debt level. Data analysis techniques ANOVA and Kruskal-Wallis (KW) was used to evaluate the hypothesis formulated. The results of hypothesis testing showed the rejection of the null hypothesis due to of no statistically significant differences, considering a 10% significance level.

Introduction

Organizations, in general, are formed by a set of activities which demand from the environmental a sort of resources necessary for their achievements. The size of these organizations are diverse, as well as the segments and geographic locus where they work. Do formalize decisions is part of the management process of these companies, particularly those whose related to profit or losses. Decisions made by managers, on the one hand, are related to strategic positioning and formulating strategies that will drive their business, on the other hand, are rendered on the operational aspects, related to the business-as-usual in any organization.

The maintenance of companies in a competitive environment requires that decisions, whether strategic and operational, should consider aspects of the exogenous and endogenous environment in their formulation. The literature, in general, exposes several understandings - and sometimes conflicting – about the concepts of strategy, its wording, and implementation. Those different views come from several approaches advocated by various strategy schools.

The research about strategy group emerged with the aim of studying the behavior of the companies in the competitive industry environment. According to Barney (1991) and Athanassopoulos (1995), Strategic Groups are defined as a group of companies that have similar strategic characteristics such its assets, structure, financial and non-financial performance, product differentiation level and market positioning.

On this context, the occurrence of different financial return within the industry is likely to be investigated both for the differences between firms, but also between the strategic groups in a specific industry.

The objective of this paper is to analyze the existence of significant differences between strategic groups of Brazilian construction companies about their financial performance. In this context, the question of research that aims to answer, can be expressed as follows:

There are statistically significant differences between the strategic groups of construction companies about their financial performance?

The answer to the research question must be answered based on some specific methods, including the hypothetical-deductive and statistical, supported the positivist paradigm.

The work is divided into five sections which can be summarized as follows: (1) introduction; (2) theoretical background; (3) methodology employed; (4) presentation and analysis of results and; (5) concerns the final considerations.

Theoretical background

Strategy

The concept of strategy has several definitions, Chandler (1962) initiated this discussion pointing that strategy is an adoption of actions and definitions of organizational objectives. On the other hand, To Mintzberg (1987), the strategy is an ordinance of the organization and the distribution of activities in order to share the same responsibilities among individuals. It is a set of objectives, policies, and plans which define the company's purpose and methods of survival and success (MINTZBERG et al., 2006). In the same vein, Mintzberg, Ahlstrand, and Lampel (2000) describe five strategy definitions - the 5 Ps of Strategy, turn it into strategy as perspective, as position, as plan, as a ploy, and as a pattern.

Andrews (2001, p. 58) addresses the concept of Business Strategy, setting as a "pattern of decisions in a company that determines and reveals its objectives, purposes or goals, as well as, produces the major policies and plans to achieve these aims."

Associating strategy and decision-making, Ansoff (1965) defines strategy as a set of rules and decision-making in conditions of a partial lack of knowledge.

Porter (1986) argues that strategy can create a valuable position, involving a different set of activities. The author developed his studies based on "industrial organization" and especially on "structure-conduct-performance", showing that the segment structure establishes the competition within the sector.

In a process vision, Montgomery and Porter (1998) claim that strategy is related to the investigation of an action plan to produce and adjust the organizational competitive advantage.

These various ways of strategy definitions express the relationship the company has with the internal and external environment, where there is a concern about how these factors may influence the formulation and adoption of some strategy, which will drive the organization in the future.

Competitive Strategies

There are different definitions of competitive strategy. In one of its strands, the competition theory, points that the competitiveness is considered a sustainable ability to survive, or capacity to grow into new markets or among its market competitors.

Porter (1990) explained that international competitive suppliers and distributors, are key elements of competitive advantage, showing that the vertical relationships of dependency are implicit to the positive performance of the firms. According to Porter (1986), the competitive strategy aims to establish a profitable and sustainable position against the forces that determine the competitive industry.

To Barney (1991), in some cases, organizations must add hard imitability resources enabling the development of services and differentiated products to achieve a sustainable competitive advantage.

According to Farina (1999), the concept of competitiveness directly results in the definition of performance indicators considering one of these indicators the mar-

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ket participation indicator, and which includes the innovation in products and pro-
cesses (when it adequately meets the requirements of consumers). To the same au-
thor, cost and productivity are part of the competitiveness, considering them as effi-
ciency indicators.

Farina (1999) argues that to consider the use of strategy as something compet-
itive, it depends on the way the organization intends to modify or adapt its internal
environment to pursue its strategic objectives.

As defined by Martins et al. (2010), the competitive strategy can be defined as
the method by which the organization uses strategy to adapt and/or change envi-
ronment aspects to reach a more favorable alignment.

Raymundo, Contador, and Contador (2013) indicated that due to the increase
of competition, the implementation of competitive strategy for company's sustaina-
ble progress is essential to consider three stakeholders: the company, the buyer's
market, and the competition.

Competitive strategies according to the Porter model

According to Porter (1986), the competitive strategy must be related to the
company and its environment. The same author presents a model that demonstrates
the company's strategy, profitability, and competition within the industry through
the implementation of five competitive forces: (1) the threat of new entrants; (2)
bargaining power of suppliers; (3) bargaining power of buyers; (4) the threat of sub-
stitute products or services and; (5) rivalry between existing competitors.

These five forces, once together, establish the profitability and the competition
in the industry. In a competitive strategy, companies can preserve themselves from
these forces or uses them to their benefit when they are in a leading position in the
market.

Porter (1986) pointed that when is performed the analysis and are determined
which forces that influence the competition, companies can make an offensive or
defensive action plan on competitive strategy including the anticipation of change
and posit the company changing their capacity to defend themselves from the com-
petitive forces also influencing on the balance of these forces. Therefore, this five
forces model defines the level of competition within the industry and its possible
profit margin.

In a Porterian vision, the strategy mainly aims to lead the company to a favor-
able position in the industry and defend, in the best way, from their competitors. The
same author defines strategy as being the means used or the path set by the company
to achieve its objectives, to be competitive, and stand out front of their competitors
and consumers.

In order to define some strategy, it is essential that this strategy should remain
aligned with the products, markets, customers and in the company's business con-
text. From interaction between these elements, there are possibilities for the compa-
ny be competitive by focusing efforts to adopt strategies which reduce the cost of
production, differentiate products and allow the segmentation of the market. To
overcome the competitors through the competitive forces in the industry, the meth-

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ods used are cost leadership, differentiation, and focus. A lack of a crystal clear vision of strategy can lead the company to the loss of the main competitive advantages.

Strategic groups

The beginning of the Strategic Groups Theory came from studies of similar strategic behavior between organizations, following the Hunt logic (1972) expanding in the recent decades by research in several sectors such: industry, pharmaceutical, technology information, supermarkets, and others.

The theme of strategic groups is becoming increasingly important due to several companies establish strategic alliances and networks of relationships in the early XXI century, to complement the limited resources to reach the performance aimed at corporations related to these groups.

For Bahls et al. (2014) strategic groups can be defined as a group of organizations that show similar characteristics relating to certain physiognomies such as cost structure, formal organization, rewards management, product diversification and the choice of results available within a particular industry.

Enterprise groups arise in industries where there is a similarity between the assets, the structure, and the performance, thus making a set of behaviors (BARNEY, 1991).

Porter (1980) defines strategic groups as an analytical method presented to contribute to the structural analysis. It refers to observe the industry in full and conceptualizes each firm separately. From the set of companies, analyzes the essential structure of the group competition, clarifying their influence and investigate the dispute between groups.

As pointed by Araya-Castillo et al. (2014), the concept of strategic group is defined as a group of companies that intends to add resources, market, and commitments in the industry and their respective areas of activity equivalent in scope.

For Santos et al. (2012), the existence of different strategic groups pointed out that the big corporations in a domestic industry have peculiar internal difficulties to the relevant aspects and resources than small businesses. For the authors, it is confirmed that micro and small businesses should focus on other strategies, avoiding the dispute with the economies of equivalence of large companies. As a result of strategic groups, those which have just conceiving internal impeditive of change, strengthened the competitiveness of the domestic industry, for example, stays at the top.

On the other hand, the lack of mobility barriers enables companies with good results arising from successfully implemented strategies which could allow those who seek equal profitability the chance to come near. The existence of obstacles to mobility is one of the main reasons some firms are more profitable than others (PORTER, 1986).

A reasonable explanation about different profits between the companies relies on the fact that the strategic groups analyze and react similarly to external factors due to their strategies, resources, management ways, all in common, developing barrels to mobility intentionally (PETERAF; STANLEY, 1997).

According to Porter (1986), an industry can belong to only one strategic group, since all competitors apply the same strategy. An important behavior of companies

which is part of the strategic group is the relationship with the parent company. The strategic dimensions must cover the connection of each company with the matrix.

The existence of strategic groups in the industry occurs due to several reasons, such as the strengths and weaknesses of the companies, the inclusion of the company in the business or historical incidents. Once formed strategic groups, companies belonging to this group become similar not only in their strategies but also by sharing the same market and react similarly to external factors and competitiveness.

The advantage of a composition analysis on Strategic Groups is related to behavioral and physical characteristics of the companies that have the same strategic purpose.

As pointed by Porter (1986), Strategic Groups are sets of forces that affect the industry sector in which companies are. These forces act over competitiveness in two ways, at the entrance barrier (product differentiation, switching, distribution channel, economies of scale) and by the rivalry from themselves.

It is necessary to make a relationship appraisal between strategic groups and the five competitive forces (PORTER, 1986). Porter also argues that a true competitive strategy posit an attack action against the five forces and maintain a secured position, by the determination of three general strategies: (1) differentiation; (2) lead in total cost and; (3) focus (PORTER, 1998).

By taking into consideration the characteristics of the organizations, they are impacted in different ways by the forces acting on the sector analyzed, once they need to overcome higher or lower entry barriers and have various levels of adaptation to the success key factors, they are grouped into sets of similarities to distinguish companies of a strategic group from other groups of companies.

For recognition of the strategic groups, it is primordial make an analysis of the variables which are relevant to the study in parsing (MASCARENHAS, 1989) and the features that are similar to strategic management in the organizations that are embedded in the same sector. Such analysis is given based on the variables and the methodology used in research on strategic groups.

According to Fiegenbaum, Sudharshan and Thomas (1993), it is necessary to determine the characteristics of the sector in which the organization operates. On the other hand, McGee and Thomas (1986) found in their research variables like ages, quantity of brands, sales volume, size, price, and other investments to determine differences within a sector.

Metrics of financial performance

Methodologies of performance assessment passed for several changes during the last 30 years. It started in the 80's when two models of performance aroused, the Smart model by Cross and Lynch (1988; 1989) and performance evaluation questionnaire by Dixon et al. (1990).

In the 90's Kaplan and Norton developed the Balanced Scorecard, which is a simple model, however, an effective performance measurement. In the same decade, the European Model of Business Excellence (EFQM) was developed, which brought a significant impact regarding the measures used in business and how the companies use these measures.

The integrated performance management of measuring system was tested for the development of an auditable references model and had three mainstreams, namely: (1) structure (BITITCI; CARRIE, 1998); (2) information (KEHOE; LITTLE, 1998) and; (3) people's behavior (BACKHOUSE; BURNS, 1998). Several areas of the company and also different processes such as product development, production planning and control, human resources and management services can use performance measures to better control of their demands and deliveries.

All performance measurement definitions had great significance in the organizational management. However, these studies had, as research's object, a single company. The organizational changes happen at several levels, from the structural until the operational. Performance evaluation of structural level exercises power in external variables that act on the organization, such as competitors, other organizations, suppliers, government, laws, and others variables (ALMEIDA; MARÇAL; KOVALESKI, 2004).

Modro et al. (2015) emphasize that the indicator Price / Profit (P / P) contribute vigorously to the return analysis of constant actions, ensuring its relevance as a measure of investment decisions.

As explained by Garvin (1998), there are many performance grades in an organization. The same author says that there is a temporal edge for the management of processes: behavioral processes, which involves decision-making, are medium-term procedures; change processes, where development and transformation contribute to avoiding the organizational decline, are long-term processes and; working processes, where creates and producing goods and/or services, are short-term processes.

Parmenter (2002) segregates performance indicators as performance indicators (PIs), results in indicators (RIs), and those characterized as key performance indicators(KPIs). The PIs are the union of indicators and have the function to present the performance of a particular industry or organization department. RIs have the function to show the overall performance of the organization, which can include net income and company's market share. KPIs are results from the execution of processes and appear in a higher quantity inside the company.

The performance measurement depends on the focus and data availability (PERIN; SAMPAIO, 1999). According to Barney (2002), the performance is the result obtained from comparisons between the expected value for shareholders and the actual value created by the organization. Therefore, three main resolutions are necessary to this comparison, the average performance, to get the expected result, a higher value to get a better result than expected, and a lower value which represents lower performance in comparison to the desired results.

Cool and Schendel (1988) indicate the use of multiple indicators to ensure a correct performance assessment. As pointed by Fernandes and Santos (2008) based on studies of Hult et al. (2003), Pelham and Wilson (1996), Chakravarthy (1986), and Cronin and Page (1988) the methodology used to measure the performance can be composed of four factors: (1) financial indicators; (2) internal performance; (3) customer satisfaction and; (4) internal improvements.

Likewise, the performance can be seen through two optical, through a subjective concept where performance is a company's assessment or through an objective

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concept by using absolute measures of performance. Indicators such as ROI (return on investment), ROS (return on sales) and ROA (return on assets), used by on competitive strategy by Porter (1980) and Cool and Schendel (1998).

Methods

This section highlights all the methodological steps for this research to comply the principle of reproducibility and allow the replication of future research by other researchers. The section is structured as follows: (1) data gathering description; (2) variable definition; (3) research hypothesis and; (4) data analysis.

Data collection

This applied research seeks the production of scientific knowledge with immediate and practical application in reality (GIL, 2008). It is a quantitative study, ex-post facto, once it occurs after the events in vogue by using longitudinal data from the publicly held open capital company within the Brazilian construction industry between the period of 2010-2013. Data collection happens in the database provided by Economática Software para Investimentos S.A.

The total population is about 62 organizations registered in this database. However, to the propose of this study, had considered only organizations with full availability of their earnings statement, disregarded all companies without complete information.

On this context, the sample collected with the sampling process is not probabilistic for accessibility was 26 construction industry organizations. These data had been transported to an Excel spreadsheet which was standardized statistical data treatment.

Companies were ranked based on construction area of literature to prevent distortions in the composition of strategic groups, taking advantage of the following type: G1 which is formed by construction companies residential and commercial buildings and belong, at the same time, to the heavy construction; G2, which is composed only of heavy construction companies, and; G3 including only the construction companies of residential and commercial buildings. The list of companies names is in Table 1.

Table 1 - Formation of Strategic Groups

Group 1 (G1):	Azevedo PN. Const A Lind ON. Cyrela Realty ON. Helbor ON. JHSF Part ON. Joao Fortes ON. Lix da Cunha PN. PDG Realt ON. Sergen PN
Group 2 (G2):	CC Des Imob ON. Mendes Jr PNB. Sultepa PN
Group 3 (G3):	Brookfield ON. Cimob Partic ON. Const Beter PNB. Cr2 ON. Direcional ON. Even ON. Eztec ON. Gafisa ON. MRV ON. Rodobensimob ON. Rossi Resid ON. Tecnisa ON. Trisul ON. Viver ON.

Source: The Authors, 2016.

Variable definition

Strategic Groups: The definition of strategic groups in the construction industry uses the product similarity criterion and services based on the definitions proposed by Tang and Thomas (1992) and Porter (1979; 1980). The size of the company will be determined using, as a proxy, the total annual revenue, and total assets, both expressed in Brazilian currency (R$).

Financial Performance: Are the financial results of an organization, in this case, it links linked to revenue and profitability indicators, associated with other indicators (OTTOBONI; PAMPLONA, 2001). The definition of Financial Performance is the quantification action.

Hypotheses research

The research hypothesis can characterize plausible assumptions placed as a conditional answer to the research problem. In this regard, the provisional hypothesis confirmed or disproved with the development of investigation.

Is emphasized that a theory that has a higher probability of presenting a genuine contribution to scientific knowledge should base the research hypothesis.

> In large industry market structure (such as industry structure grows to buy other industries) has an influence on profits of all companies in the industry and the average profitability of this industry. In this context, however, barriers to mobility that protect a certain strategic group determines their potential profitability. (Porter, 1979, p. 218)

The company earnings inside an industry and in a particular strategic group can be eroded, among others, by the rivalry. Therefore, based on these arguments, it formulated the following hypothesis search:

H0: There are no statistically significant differences between strategic groups of Brazilian construction companies.

This hypothesis of research will be supported or refuted by the use of non-parametric hypotheses test of Kruskal-Wallis.

Data treatment

By analyzing a some of the studies addressing the strategic groups theme, the usage of several quantitative techniques was identified, among them, the hypothesis tests for differences between population means that will be employed in this study.

Results

Exploratory data analysis

Initially, an exploratory analysis of data collected by descriptive statistics of the variables considered in the study was prepared. In Figure 1, there is the box plot

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chart for the year 2010 to the year 2013, detailing the behavior of variables size, return on assets (ROA), and debt levels.
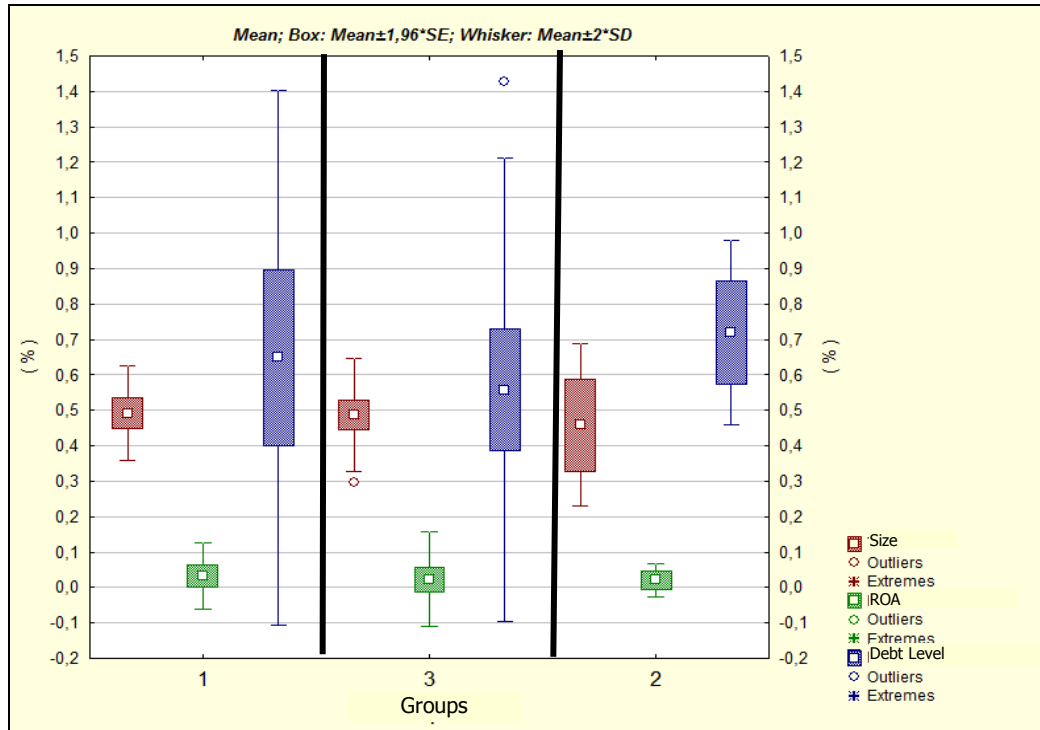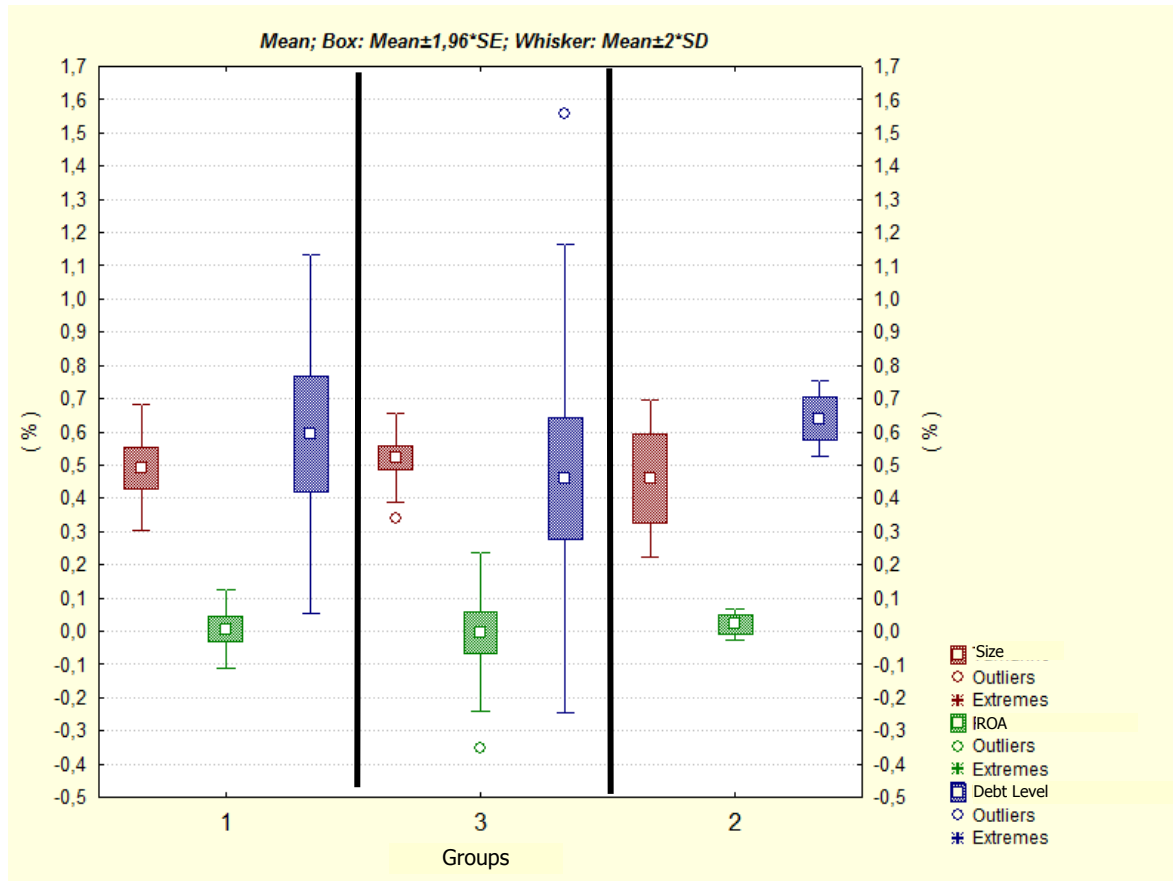

Figure 1 - *Box & Whisker* to 2010 variables
Note: The values of the size of the company as billing proxy was divided by 10, to standardize the scale.
Source: The Authors, 2016.

Looking at Figure 1 which displays data of 2010, the size variable of Group 3 has an outlier expressed by a logarithms proxy of annual revenues. By comparison, the Group 3 data showed a high variability in all variables (size, return on assets - ROA, and debt level). In addition, another outlier in the variable debt level to Group 3 was observed. The variable debt level shows a remarkable variability in all groups, but especially in Group 1 which showed a higher whisker compared to the other groups.
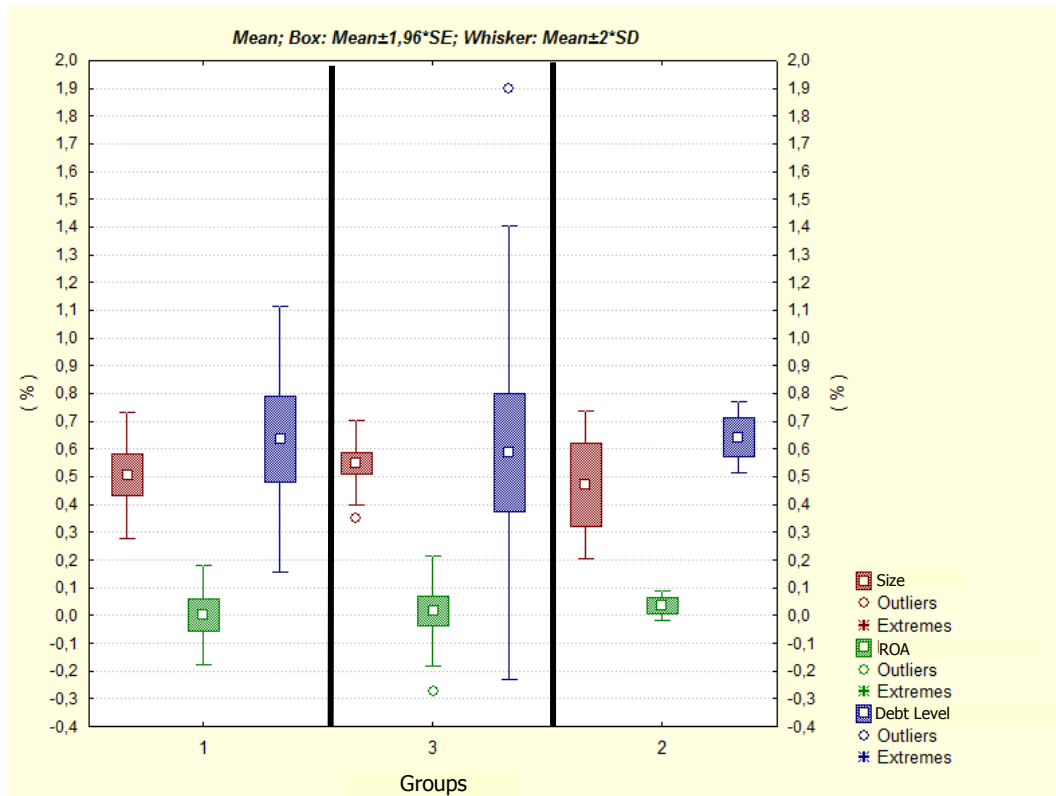
Figure 2 - *Box & Whisker* to 2011 variables
Note: The values of the size of the company as billing proxy was divided by 10, to standardize the scale.
Source: The Authors, 2016.

On Figure 2, with used data of 2011, the analysis of variable size identified outliers in all variables of the Group 3. A general comparison over calculated whiskers between Group 3 and the other two groups proved to be higher. Group 2 showed more similar values due to the absence of outliers and lower variability (the whiskers, which measure the confidence interval at the level of 95%), despite this, Group 2 has the higher dispersion around the mean on variable size.

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Figure 3 - *Box & Whisker* to 2012 variables
Note: The values of the size of the company as billing proxy was divided by 10, in order to standardize the scale.
Source: The Authors, 2016

Figure 3 presented data of 2012 and they are quite similar that data from 2011. Again it pointed outliers in all variables of Group 3, and the Debt Level remains as the biggest variability in Group 3 compared to the other two groups. In Group 2 the variable size remained to show a greater dispersion around the mean in comparison to others two groups.

On Figure 4 with data of 2013, Group 3 again remained with outliers in all variables. On Group 2, the variable ROA showed high homogeneity, but both Group 1 and 3 also presented significant reduction in variability of ROA. The variable size remains at the same level in all groups in comparison to 2012.
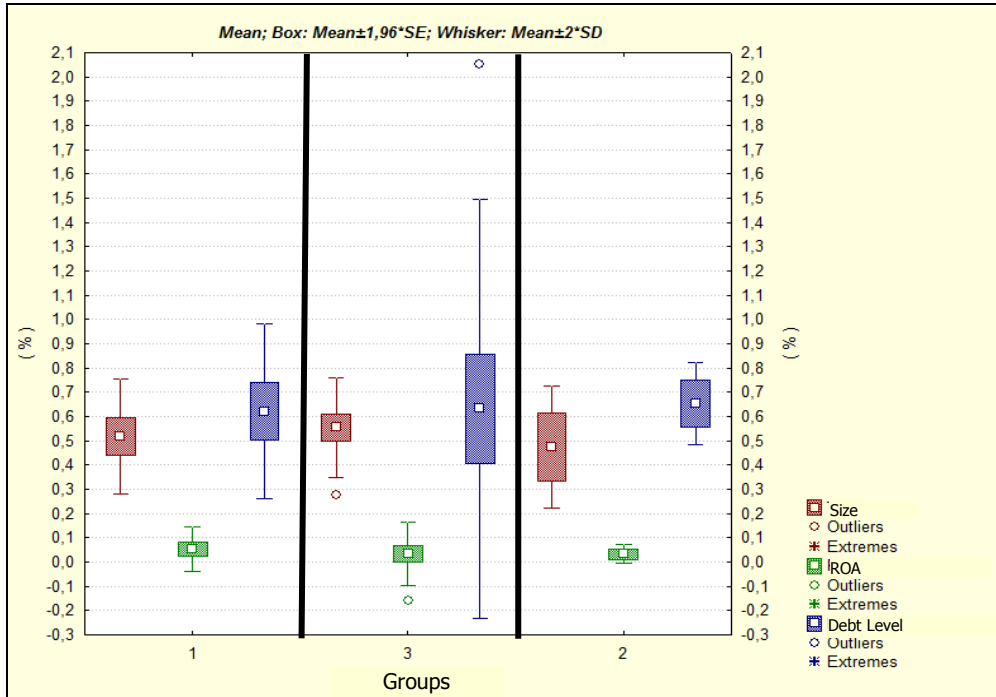
Figure 4 - *Box & Whisker* to 2013 variables
Note: The values of the size of the company as billing proxy was divided by 10, in order to standardize the scale.
Source: The Authors, 2016.

Figure 5 shows the behavior of the average values of the three variables analyzed: (i) Debt level, (ii) ROA, and (iii) Size in the period between 2010 and 2013.
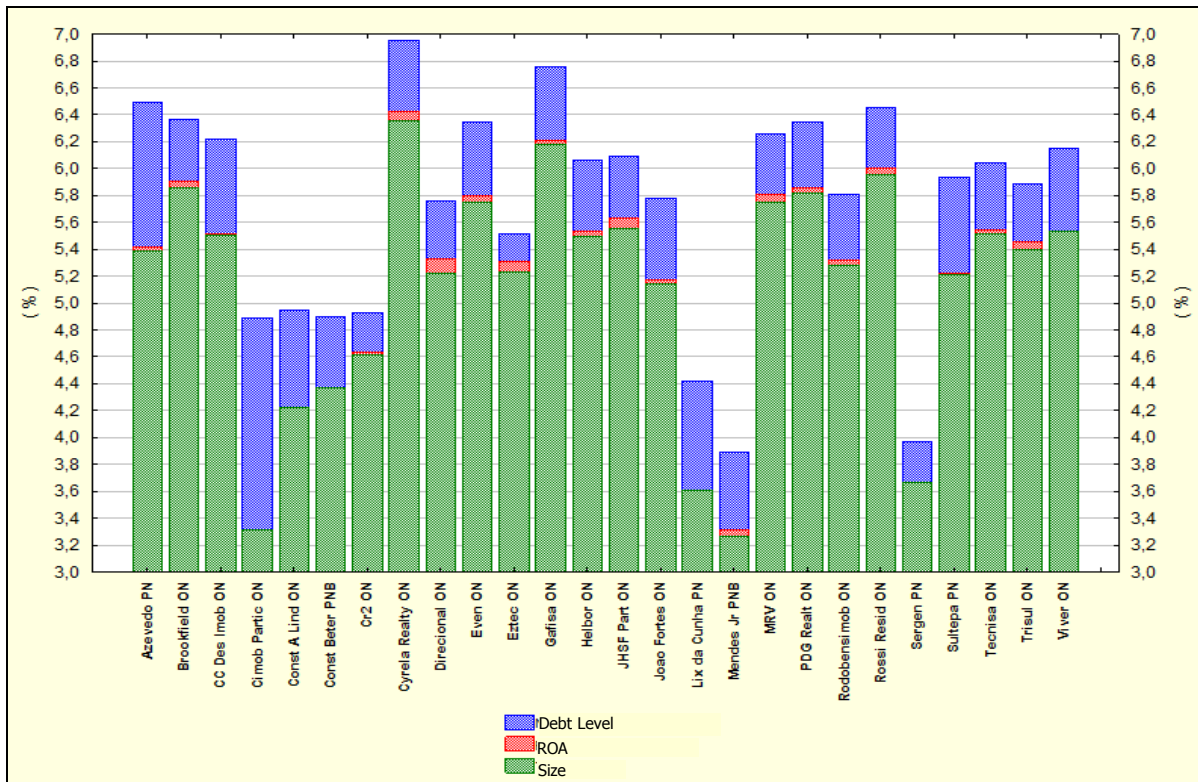

Figure 5 - Average behavior of the analyzed variables

By analyzing the columns in Figure 5, detailed by the company, it highlights the low percentages about return on assets, both in general and in the Group 2, specifically, despite the ROA participation of Mendes Jr. company.

In Group 1, formed by companies that operate both in the heavy construction segment as commercial and residential, draws attention to the low percentage of debt and company size and the absence of return on assets on Lix da Cunha and Sergen. The other companies boast high percentages of debt and are significant-sized.

The companies comprising the Group 3 operates only in residential and commercial segment, the companies present, mostly, the high debt level and any significant-sized.

Normality analysis of variables

The Kolmogorov-Smirnov normality test was applied to the data collected to ensure proper use of parametric statistical tests, which take into account the assumption of normal distributions. Table 1 shows the results for the Kolmogorov-Smirnov statistic.

Table 1 - Normality test of variables

		Size	ROA	Debt Level
Normal Parameters[a,b]	Mean	5,122	0,0208	0,594
	Std. Deviation	0,932	0,0752	0,319
Most Extreme Differences	Absolute	0,158	0,204	0,169
	Positive	0,083	0,098	0,169
	Negative	-0,158	-0,204	-0,097
Kolmogorov-Smirnov Z		1,613	2,085	1,718
Asymp. Sig. (2-tailed)		**0,011**	**0,000**	**0,005**

a. *Test distribution is Normal.*; b. *Calculated from data.*
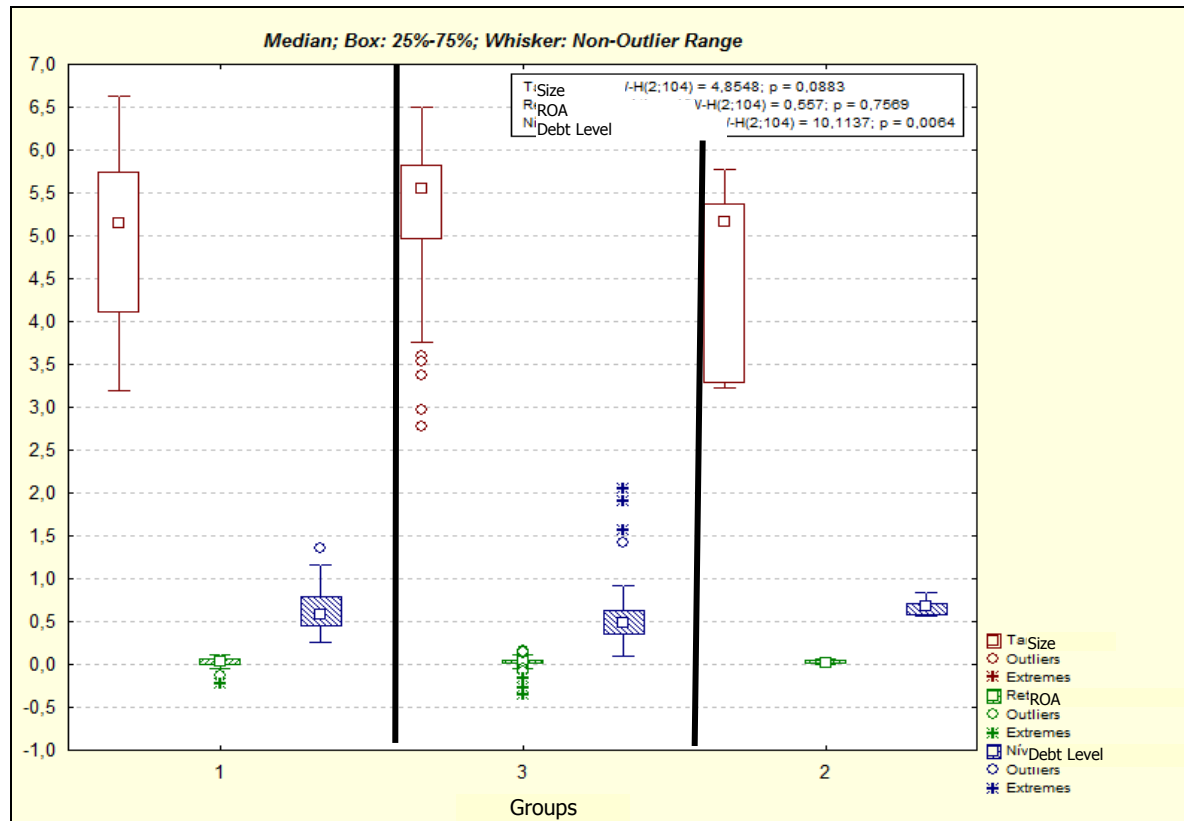Source: the Authors, 2016

Based on the results of the statistical test Kolmogorov-Smirnov it is possible to conclude that the null hypothesis was rejected at a level of statistical significance of 5%, the behavior of the probability distributions of variables approaches to a normal distribution.

The probability values of the statistic test to the variables size, return on assets, and debt level were, respectively, 0.011, 0.000, and 0.005, all lowers than the significance level of 0.05 or 5%. Therefore, according to the results, the distribution of variables does not follow the pattern of a normal distribution. Since there is no guarantee that the normality assumption of the distribution of the variables studied is attended, it is appropriate choice non-parametric tests.

Non-parametric variance analysis by groups

In order to verify if the results have statistical consistency regarding the formation of the groups, the Kruskal-Wallis nonparametric hypothesis testing was applied on each performance indicators, namely: size, return on assets and debt level.

The null hypothesis considered that at least one of the medians of each group is statistically different from the others, considering a statistical significance level of 10%. Figure 6 shows the result of the hypothesis test for statistical Kruskal-Wallis test [KW] in the period between 2010 and 2013.

Figure 6 - Kruskal-Wallis (KW) statistic by Group.
Source: the Authors, 2016

Figure 6 shows that at least one of the medians of the groups differ statistically, therefore, reject the null hypothesis. Still based on that number, it results in KW statistics are lower than the 10% significance level, except in the variable return on assets, the value of probability (0.7569) was higher than the degree of significance adopted. Therefore, it can be said that the groups were correctly set up.

The research hypothesis stated "H0: There are no statistically significant differences between strategic groups of construction companies," while an attempt for answer the research question - can, at last, based on the findings and statistical tests be evaluated. KW test the statistical evidence that there are significant differences between strategic groups consisting of companies surveyed in the construction industry. Therefore, based on the statistical test results KW, the research hypothesis was not supported.

Debt influence on corporate profitability and business risk to shareholders and/or owners. In the Brazilian construction industry for its long-term characteristics and dependence on large amounts of debt, the production cycle, sales and sometimes of the receivables, the business risk is much more volatile.

The weight of the debt in return rate levels on assets used stems from the decisions taken by managers on the capital structure. For Assaf Neto and Lima (2009):

> The capital structure of a company refers to the composition of its sources of funding from third capital [required] and capital [equity]. [...] In the pursuit of wealth maximization objective, the company must select a composition of funding sources to promote the minimization of weighted average cost of capital [WACC]

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In general, in a company, the assets [regardless of the types] are funded by a combination of equity and third parties. Equity is this obtained from the investors - partners or shareholders - and appears on the balance sheet under the net equity item. On the other hand, third-party capital, short and/or long-term, costly or inexpensive, appears in the liabilities, usually segregated into short and long term.

Therefore, one cannot ignore the importance of form is the composition of resources - are only own or combined own and others - nor its impact on the profit rate of return on assets.

However, it is not only the capital structure and the inherent risks of this decision for the business and shareholders that impact the rate of return on assets. On the growth opportunity, types and operating assets amounts have implications on capital structure and consequently the cost of funding. In companies with substances values of operating assets, they serve as good collateral in securing loans (BRIGHAM; EHARHADT, 2006, p 617.).

The findings of the work of Jorge and Armada (1999) and Nakamura, Martin, and Kimura (2004) suggest that lenders prefer to lend to companies with major fixed assets that serve as collateral as a guarantee in case of financial hardship, and that charge lower interest rates.

In Brazil, the construction industry, particularly residential, except in sectors where firms are opting for differentiation strategy, offering high-standard buildings, is dependent on tax incentives, economic and credit policies.

The Growth Acceleration Program or "Programa de Aceleração do Crescimento" (PAC) established by the Lula government among its lines of action emphasizes the program "Minha Casa, Minha Vida" focused on low-income population. In this case, the construction companies in the residential segment, clearly opting for a cost strategy.

The large volume of financial resources invested by the Federal Government through the program "Minha Casa, Minha Vida", during the period analyzed, is an inducer for the construction companies working in this segment follow the same cost strategy. Looking into this context, together to the accessibility to capital markets and reduction of financing costs are a relevant concern, there is also a decrease in production and sales costs, especially in production by the shortage of labor supply.

Discussion

The construction industry, given its characteristics and scope of its value chain, has a significant weight in the Brazilian economy, particularly as the major employer.

Brazil is experiencing a unique moment in the construction industry, with companies listed on the BOVESPA, including significant participation of foreign investors, as the case of company Thá from Paraná.

The economy of the construction industry in our country is always dependent on government actions, particularly regarding large projects such as dams, roads, and other large constructions. For the segment of residential buildings, the level of activity is dependent also on government policies, is a credit to businesses such as financing to consumers.

So, in this scenario, to understand how the construction companies operating in the sectors of heavy construction and residential construction, these are grouped into strategic groups and mainly variables which influence the financial performance - metric Return on Assets - is contributing to academia and practitioners

The implications for practitioners - managers of companies, analysts, investors - is the need to understand the gradations, not only in the construction market but mainly about its strategic position and under the generic strategies of Porter are acting.

To the academy, it is evident as a contribution, the need to better understand the formation of these groups, in this specific sector and to strive to understand the causes of differences in financial performance.

As for the findings of this research, a limitation and it is not generalized to all companies in the sector in Brazil. For the sake of database limitation on the accounting and financial data, such surveys are limited, in general, public companies with shares on the Stock Exchange.

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