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COMPARATIVE ANALYSIS OF INDICATORS STRATEGY IS GICOS MANAGEMENT APPLIED IN AGRICULTURE

^{1,*}Sergio Cavagnoli GUTH and ²Vinitius P Aim B roglio ZUANAZZI

¹Ph.D. from the University of Aveiro, Portugal Professor, Professor of the University of Caxias do Sul - Brazil ²Graduated in Administação and Ciêcias Contábies, University of Caxias do Sul

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ABSTRACT

This paper addresses the theme of strategic management indicators and was analyzed with a view to agribusiness. They are instruments of orientation and performance measurement either for prognosis or identification of solution alternatives. The study aimed to compare the results of strategic indicators, considering similarities and non-similarities. The methodology is characterized as applied research, classified in relation to the objectives as exploratory and descriptive, using documentary procedure and the approach is quantitative. The research was applied to agricultural companies whose data were obtained in the Valor 1000 yearbook, published by the Valor Econômico newspaper. The study was based on publications from 2015, 2016, 2017 and 2018 that pointed to the results for the previous year. The sample consisted of 26 companies that presented the largest number of data in the selected period. It is concluded that the economic and financial performance measured through the Net Margin, Return on Equity (ROE), EBITDA, Current Liquidity, Return on Investment (ROI) and EVA indices fluctuated in the years 2015 and / or 2016 due to the economic crisis with resumption of growth or stabilization in 2017. The average onerous debt ratio fell in all periods, but is still considered high. The bservou the trend of the companies that accompanied and reflected the economic downturn and those that have not been absorbed jutting a scenario, as a rule, unfavorable. From the above it was verified the importance and contribution of effective and constant employment of strategic indicators in the current economy.

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INTRODUCTION

Since the last decades there have been numerous social, political and economic changes in the world. With globalization and technological improvement it can be seen that significant changes are occurring more frequently and changing market and management aspects of companies. We are currently experiencing the so-called Fourth Industrial Revolution [https://www. agrolink.com. br/ georreferenciamento/ agricultura- de-precisao_361504.html. Accessed on: 12 Apr. 2019], that is, it is a period of profound changes in the technological and social spheres, which is being marked by the integration between physical and digital technologies (SCHWAB, 2016).

*Corresponding author: Sergio Cavagnoli GUTH,

Ph.D. from the University of Aveiro, Portugal Professor, Professor of the University of Caxias do Sul – Brazil.

This phenomenon is causing significant changes with reflexes not yet fully known by the market and society. Regarding the business world, it points impacts on productivity, costs, control of production processes; causes changes in the economic scenario and consequently a change in corporate positioning strategy. It can be said that these changes are systemic, ie, affecting all sectors of the market. In agribusiness, we highlight the emergence of technologies in the field such as the use of drones, autonomous tractors, biotechnology, sensors and machines capable of promoting "precision agriculture" [Agro, 2018]", on the other hand, for example, emphasizes the need for professional development. Thus, there are opportunities for productive improvement and competitiveness, but there are also important challenges for companies to overcome. In Brazil, the professionalization of agribusiness management has been gradually taking place. One of the contributing factors is the regulation of the market itself, indicating that there is no room for amateur management. It is noted that studies in the area of G are accompanying this advance and have had rapid evolution in recent decades. It is observed that there has been an increase in the complexity of organizations, including how to manage them. It is noticeable that to keep up with these continuous changes, entities become more flexible, more adaptable. An important aspect to note in today's business management is that their decisions are aimed at adding value. Padoveze (2010) points out that the purpose of business entities is based on the concept of value creation. Assaf Neto (2015) argues that the maximum objective of the company is the maximization of wealth of owners and that the adoption of any policy by companies makes sense if it is aimed at creating value for shareholders who are those who assume business risk. Therefore, it is realized that it is through value creation that companies can effectively create wealth for their shareholders or owners.

Achieving goals and targets is known to require hard efforts from organizations. Continuous monitoring of processes and results is important. The instruments commonly used for performance measurement are indexes or indicators. From the foregoing scenario, it is noted that the market becomes increasingly complex, competitive and demanding, which demands from its agents continuous evolution in processes, products and services and as a result of all the knowledge that surrounds it. In this context, it is relevant to study the financial aspects of management, having the fundamental contribution of accounting by the managerial approach, using strategic indicators as tools that when well measured and interpreted are able to support decision making assisting in the compliance with business objectives.

Theoretical Reference: The theoretical framework, according to Lakatos and Marconi (2017), contains the theoretical foundation of the research, as well as the definition of concepts consistent with the theme. Thus, this chapter presents the bibliographic survey that supports the study.

Strategic Indicators: Financial statements are full of useful information that helps users understand companies, make predictions, and make business decisions. Through them, it is possible to evaluate business performance by providing management information. Thus, decisions are made based on accounting and financial analyzes that include ratios calculated from these statements (OLIVEIRA et al., 2017). Matarazzo (2007 apud BASTOS et al., 2008 p. 2) defines that "index is the relationship between accounts or groups of accounts in the Financial Statements, which aims to identify a certain aspect of a company's economic or financial situation". Analysis through financial and economic indices enables the comparison of values obtained with other periods and the relationship of these values with other related ones (REZENDE et al., 2010). It is noteworthy that an index analyzed in isolation does not produce enough information to lead to a correct conclusion. Thus, it is essential to know the evolution of the index in a temporal (usually the last three years) and intercompany mode, relating to what level it is in relation to competitors and market standards (ASSAF NETO, 2015). In the analysis of the company's financial statements, it is important to avoid generalizing the interpretation of the financial statements. In addition, an understanding of the company's business, the sector of activity and its inherent risks and knowledge of the accounting practices adopted constitute the basic requirements of a good analysis. (ASSAF NETO,

2015). The valuation of companies from different sectors is possible when they present similar fundamentals as risk, cash flow and growth (DAMODARAN, 2002 apud BASTOS et al., 2008). Starting with the question of performance evaluation, Neely (1998 apud OLIVEIRA et al, 2017) conceptualize: The assessment of business performance can be conceptualized as the result of the process of quantifying the efficiency and effectiveness of companies, through the collection, analysis and interpretation of the data obtained, generating important information for the decision making of the information user. It is through this assessment that managers identify the failures of organizations and prepare to face changes in the business environment. Abdel- Kader, & Luther, 2006; Nita, 2008; Neely, (1999 apud SOUZA; ENSSLIN; GASPARETO, 2016) explain that Performance Evaluation is one of the management practices that aims at aligning the company's objectives with its strategy. Through this practice companies make measurements according to established standards and have information related to their internal or external performance.

By checking the quality of performance through the use of performance indicators, managers can make safer decisions about the organization's strategies, since they have specific information for management purposes (ZILBER; FISCHMANN, 2002 apud CALLADO et al., 2007). In the view of Atkinson et al. (2000) performance evaluation provides a link between planning and control. Planning develops the strategies and objectives and processes to achieve them; Control seeks to keep the company on track toward achieving its objectives. The performance appraisal system, according to the authors, has three primary functions:

Focus company members on choosing primary and secondary objectives in the planning process and choosing performance measures for those objectives. Coordinate decision-makers by ensuring that all members of the company understand the company's primary and secondary goals and how each contributes to those goals. To perform this role, you need to specify the secondary performance reviews that each member of the company is responsible for administering. Provide a basis for organizational learning by providing contemporary primary and secondary performance measures so that company members can test alternative explanations of cause and effect relationships (ATKINSON et al. 2000, p. 591). Simons (2000 apud GUEDES; STEPS; SAMPAIO, 2012) highlights three essential requirements for monitored performance indicators in a company: being aligned with the overall strategy; present the possibility of being objectively measured; and be linked to the generation of business value. The author points out the alignment of the management control system strategy has a direct relationship with the company's competitiveness. apud GUEDES; PASSOS; Similarly, Müller (2003)SAMPAIO, 2012) considers it necessary to develop a management model that ensures the integration of strategy, processes and indicators; that enables the monitoring of operational actions based on a system of performance indicators aligned with the company's strategic objectives. Vianna et al. (2010 apud SANTOS; PACHECO, 2016) believe that efforts should be directed to few indicators. because the key is to measure what is relevant about specific aspects. It is essential to identify their degree of importance and the results that can make them viable. It is noteworthy that there are several indices in the literature and each one provides specific information about organizational performance; however, a group of individuals was selected to treat

individually. Table 1 summarizes the indicators and their functionality and then develops each: The selected indicators seek to cover various financial and economic aspects: liquidity, indebtedness, profitability, profitability, operating cash generation and value creation.

Evolution of indicator studies: Numerous studies are conducted on the theme of economic and financial indicators given their importance. They are found in various ways such as articles, monographs and theses. These are studies that portray past and / or current reality. Each research contributes to the construction and improvement of knowledge. Below are some studies that address this theme. The research found the studies listed above that focus on the importance analysis, ways of determining, demonstration of advantages and applicability of various indicators and performance assessments in companies in general. Advancing in the concepts of business management follows on economic and financial management.

METHODOLOGY

The methodology used in this study is defined as follows: it is an applied research, classified in relation to the objectives as exploratory, which seeks a greater understanding and approach to the theme, and descriptive because it seeks to describe the characteristics of the issue in focus by pointing out the relationships between variables involved. The documentary research procedure is used, that is, documents published as a source of data, which will be quantitative and will receive relevant statistical treatment.

Data Analysis: This chapter's approach begins by addressing the Brazilian agribusiness sector and characterizing the chosen time horizon. Then the collected and worked data are presented. Descriptive statistical treatment was applied for each period of the sample studied. We used tables with statistical data and individualized data that synthesize the information and facilitate the visualization and understanding of the whole. Regarding the agribusiness sector, its performance is an important factor in the national economic scenario. Its presence in GDP [Alcalde, 2013] Brazilian is quite significant. In the 2018 CEPEA Annual Survey [4] / CNA [Almeida, 2016] pointed participation of 21.1%. Table 4 shows the evolution of Agribusiness participation in the Brazilian GDP subdivided into its four segments (inputs, agriculture, industry and services) from 2014 to 2018. From the table above, it can be observed that in the studied period the participation of Agribusiness as a whole corresponded to the participation of about 20% of the Brazilian GDP. Agriculture, in particular, had a share of around 5%. It is worth noting that in this period of Brazil went through a serious crisis, especially in 2015 and 2016 when the GDP fell respectively 3.5% and 3.3%, according to IBGE survey. Barbosa Filho (2017) explains that the crisis resulted from a set of supply and demand shocks resulting from the succession of economic policy errors made mainly in the period in which policies that formed the "New Economic Matrix" (NME), 2011 were adopted. / 2012. These policies were marked by strong government intervention in the economy with the reduction of interest rates and fiscal policy with directing investment, increased spending, subsidies and price intervention. The deceleration of the Brazilian economy begins in 2014, with a gradual reduction in the pace of growth. In 2015 the country risk was high, there was a sharp contraction

in consumption, with a fall of 3.9% in 2015 and 4.5% in 2016 and of investment that decreased by 13.9% in 2015 and 10.6% in 2016 (BARBOSA SON, 2017). The Economic Cycle Dating Committee (CODACE) (2017) reported that the country emerged from the 11-month recession in the fourth quarter of 2016 into an expansion cycle in the first quarter of 2017.

Characterization of the Sample: The group of companies studied is made up of 26 companies headquartered in Brazil. They are distributed in four regions as follows: Midwest (Goiás-GO and Mato Grosso do Sul-MS) with 3 companies representing 11.54% of the sample, Northeast (Ceará-CE) with 1 company representing 3.85% Southeast (Espírito Santo-ES, Minas Gerais-MG and São Paulo-SP) with 4 companies representing 15.38% of the sample and South (Paraná-PR, Santa Catarina-SC and Rio Grande do Sul-RS) with 18 companies representing 69.23% of the sample. The geographical proportion of these companies can be seen in figure 4 below:

It is worth noting that of the 26 entities in the sample 22 (around 85%) are cooperatives [Andia, 2011]. This is important because they are non-profit organizations with different rules.

Presentation of Results

Using the collected data, the mathematical formulas were applied to obtain the indices for each sample company for the periods from 2014 to 2017. A descriptive statistical treatment was also applied, determining the central measures of Arithmetic and Median Average and the dispersion measure. Standard Deviation, plus maximum and minimum values. This was intended to improve the analysis and interpretation of data. Because the data set is so large, the statistical measures taken together help to understand the overall average behavior of companies over time and to identify how homogeneous the results are. The arithmetic mean of each selected indicator in each period was considered the standard index so that each company can be analyzed and its behavior compared. Thus identifying whether or not similarity of performance. The following are the results for each indicator analyzed.

Ebitda

EBITDA shows the internal cash generation capacity. In order to make a more consistent comparison, we used the ratio EBITDA / Net Revenue and not the absolute value of EBITDA. Those companies that were able to accumulate higher EBITDA / Net Revenue are considered to perform better. The statistical data presented below, in Table 7, show that the EBITDA / Net Revenue ratio in 2014 in average values was 6.31%. The following year, the average rose to 6.92%. In 2016 there was a reduction to 5.13% and in 2017 the value rose to 6.77%, an increase corresponding to 32%, but still lower than the 2015 result. Regarding the behaviors per company, it is observed that 6 companies (SLC, EISA, Coopavel, Cocamar, Copasul and Agropan), 23% of the sample, presented the same movement as the average, ie increase of the index from 2014 to 2015, decrease from 2015 to 2016 and increase from 2016 to 2017. The other companies presented varied results, therefore not similar. Among this group, three companies (Agrarian, Integrated Cooperative and Cotrisal) stood out, which showed an improvement in the index in all periods and one company (Cotripal) that decreased this index in all periods.

Current liquidity index: The current liquidity ratio demonstrates the company's financial capacity to meet shortterm commitments. It can be understood that the higher this ratio, the greater the company's ability to finance its working capital needs. Table 9 shows the statistical data for this indicator over the period studied. On average, companies had R \$ 1.34 for each R \$ 1.00 due in the short term in 2014, rising to R \$ 1.35 in 2015, decreasing to R \$ 1.32 in 2016 and returning increasing in 2017 to \$ 1.37. The mean and standard deviation did not change significantly over the periods. It is inferred from these results that companies remained sufficiently liquid to meet their short-term obligations. Table 10 shows the results individualized by company over the period studied. It is ranked in decreasing order by the average values of each company. The data highlighted in blue represent the companies that had higher than average results and in yellow those that had lower results. The companies that remained above average during all periods were Comigo, Friato, Coamo, Cotrisal, Cotripal, Cooxupé, Capal and Castrolanda. The company EISA, Agropan, Cocatrel and Capasul were not above average only in 2017, the other companies were below average in two or more periods.

Regarding individual behaviors, it is observed that 7companies (Cotrisal, Cooxupé, SLC, Cotrijal, Lar and Cialne), 27% of the sample, presented the same movement as the average, ie increase of the index from 2014 to 2015, decrease from 2015 to 2016 and increase from 2016 to 2017. The other companies presented varied results, therefore not similar. Among this group, one company stands out (Copérdia), which presented an increase in the index in all periods and two companies (Cotripal and EISA) that decreased this index in all periods.

Onerous Debt: The Onerous Debt Ratio seeks to highlight the commitment of the company's equity in relation to its onerous liabilities (financial burden generators), which are basically loans and financing. A higher level of this index indicates greater concern about the company's financial costs. The level of debt burden remained higher than that of equity in all periods. This represents a high degree of costly capital utilization. In 2014 for each R \$ 100.00 of equity the companies had on average R \$ 120.33 (or, 120.33%) of onerous capital invested in the company, in 2015 this amount reduced to R \$ 118.88, in 2016 went to R \$ 115,25 and in 2017 reduced to R \$ 108,53. Although the average has decreased over the periods it is still considered high. It can be inferred from this that companies were already well leveraged before the crisis period and when the crisis broke out market credit was reduced which would result over the years in a reduction in the volume of loans and financing raised. The high level of onerous debt can be justified because this sector has government incentives and subsidies that make it easier to obtain financial resources at a more attractive cost. The behavior of this index is illustrated below by table 11. Table 12 below shows the evolution by company with respect to this index. In yellow we highlight the companies whose index was below average, among them Friato, Cotrisal, Cotripal, Coamo, With Me, Capal, SLC, Cotrijal, Castrolanda, and in blue those above the calculated average, highlighting Cooxupé, Coopavel, Coplacana, Coasul, Home, Integrated Cooperative and Copagril).

Regarding behavior by company, it was observed that 7 companies (Friato, Cotrisal, With Me, Copérdia, Copasul, Coasul, Cooxupé), 27% of the sample, presented the same movement as the average, ie, reduction of the index in all periods. The other companies presented varied results, therefore not similar. Among this group, 3 companies (Cialne, Agrária, Coopagril) stood out with an increase in the index in all periods.

Net Margin: The Net Margin indicates how much the company makes profit for every hundred reais sold. It thus shows the profitability of the company as a function of its revenue. In a simple interpretation the bigger the better for the company. Table 13 shows the evolution of the net margin index in the period studied. In average values there is a reduction in the years that most marked the economic crisis (2015 and 2016). In 2014, the calculated index was 3.57%, decreasing to 3.11% in 2015, and 2.47% in 2016, recovering in 2017 to 3.10%. In 2016 and 2017 there was an increase in standard deviation, ie, the behavior of the group was less homogeneous. The individual evolution of this index can be observed in table 14, which is in decreasing order of the average of the four periods studied. Highlighted in blue are the values above average and lower in yellow. With regard to behaviors by now it is observed that 7 companies (Friato, Copérdia, SLC, Castrolanda, Copagril, Coplacana, Cialne), 27% of the sample showed identical movement to that shown by the average, or decreased 2014 index for 2015, decrease from 2015 to 2016 and increase from 2016 to 2017. The other companies presented varied results, therefore not similar. Among this group, we highlight 3 companies (Cocamar, Cotripal, Copercampos) that showed a decrease in the index in all periods.

Return on Equity (ROE - Return on Equity): ROE represents the rate of return on equity invested in the company. Measures, in percentage, how much the shareholder earns profit for each \$ 100 invested in the company. Simply put the higher this index the better. Looking at table 15, it can be noted that the average ROE decreased from 2014 to 2016 with a slight recovery in 2017. In 2014 the ratio was 13.02%, up to 11.80% in 2015, 10.25% in 2016 and 10.43% in 2017. The standard deviation was 8.58% in 2014, 7.08% in 2015, 9.64% in 2016, and 9.79% in 2017, thus showing slightly higher heterogeneity in the 2016 periods. and 2017 than in 2014 and 2015. These data can be compared with the following table, table 16, which shows the ROE values for each company in the four years studied. The upper returns are highlighted in blue and the lower returns in yellow. Regarding the behaviors per company, it is observed that 5 companies (Copernia, Copagril, Castrolanda, SLC and Cialne), 19% of the sample, presented a similar movement to that presented by the average, ie decrease of the index from 2014 to 2015, decrease of 2015 to 2016 and increase from 2016 to 2017. The other companies presented varied results, therefore not similar. Among this group, we highlight 3 companies (Cocamar, Copercampos, Cotripal) that showed a decrease in the index in all periods.

Return on Investment–ROI: Firstly, it is important to highlight that the Return on Investment (ROI) was calculated in a simplified way. Due to data limitation it was used as numerator in the calculation of only the Net Profit value without adding the Net Financial Expenses. Table 17 shows the statistical treatment for the ROI indicator. In 2014 the average return on investment was 6.35%, worsening in the

Table 1. Indicators and information

Indicator	Information sought
EBITDA	Cash generation operating potential
Current Liquidity Ratio	Liquidity Indicator
Onerous Debt Ratio	Capital Structure Indicator
Net Margin	Profitability Indicator
ROE - Return on Equity	Profitability Indicator
ROI - Return on Investment	
EVA - Added Economic Value	Value creation indicator

Source: Prepared by the author (2019)

Table 3. Related Studies

Wernke, Lembeck, Bornia (2000)	Study addresses the measurement and importance of VAS.
Fischmann, Zilber (2000)	EVA (Economic Value Added) and Balanced Scorecard study as a tool for strategic decision making.
Castro et al. (2007)	Research on the relevance of indicators and tools. Among the surveyed indicators stand out among the first five positions EBITDA (Earnings before Interest Taxes Depreciation and Amortization) and EVA (Economic Value Added).
Callado et al. (2007)	Study that identifies the use of performance indicators in Agribusiness.
Bastos et al. (2008)	They sought to verify the most relevant economic and financial indicators for evaluating companies by sector of activity (commerce, industry, services, agribusiness and public services). They evaluated from the perspective of 36 indicators. Among the results obtained, the indicators of general liquidity (LG) and current liquidity (LC), operating margin (MO), net working capital requirement, non-current assets fixed assets (IRNC), EBITDA, return on investment (ROI) return on assets (ROA), gross margin (MB) and asset turnover (GA) were considered common to all sectors.
Andia , Garcia and Bacha (2011)	Develops a model for analyzing financial and economic performance, measured by accounting indicators, for Brazilian agribusiness companies. Assesses the following indicators: degree of financial indebtedness (GEF), long term debt to equity ratio (ELP / PL), gross margin (MB), return on assets (ROA), return on equity (RPL), and economic value added (EVA).
Meneses et al. (2012) Alcalde , Favero , Takamatsu (2013)	Study verifies the creation or destruction of value from the perspective of EVA in companies. It explored the controversy between business and academia regarding the use of EBITDA. In the academic world, it is considered a limited indicator suitable for comparing companies in the same segment, but the business world uses it to support different decisions, ie its usefulness is considered more comprehensive. The study sought to analyze the behavior of EBITDA and the possible discrepancies that exist over time in companies in the same sector as in companies in different sectors.
Light (2013)	Study of liquidity and profitability indicators of Brazilian companies. The economic-financial indicators of Liquidity (LC-Current Liquidity and LS-Dry Liquidity) and Profitability (ROE-Return on Equity and ROAOp -Return on Operating Assets) were considered.
Barbosa e Silva (2013)	Study on indicators company valuation process. The most important were considered: Return on Equity (ROE), Profit Margin or Return on Sales, Return on Assets (ROA), Degree of Financial Leverage, Economic Value Added (EVA), Debt Ratio, Degree of Operational Leverage, Sustainable Growth Rate, Price / Earnings Ratio, Inventory Turnover.
Almeida et al. (2016)	Research focused on the EVA study verifying the advantages and disadvantages of applying EVA as a value-based management system and financial control.
Oliveira et al. (2017)	Investigates the relationship between performance indicators and market value of companies listed on the BM & FBovespa by analyzing six performance variables (asset turnover, ROA, ROE, net margin, EBITDA and EBITDA margin). The results suggested that net margin, EBITDA and EBITDA margin are the indicators with the greatest influence on the market value of Brazilian companies, while asset turnover, ROA and ROE were not relevant to the formation of corporate stock prices.
Santos et al. (2019)	Study of the economic and financial behavior of Brazilian agribusiness companies, measuring business performance by analyzing the economic and financial performance index of agribusiness. The analysis comprises the indicators: General Debt Level, Degree of Financial Leverage, Net Margin, Return on Asset, Return on Equity

Table 4. Agribusiness Participation in Brazil's GDP

Participação do Agronegócio no PIB do Brasil									
	(A)	(B)	(C)	(D)	Agronegócio Total				
Ano	Insumos	Agropecuária	Indústria	Serviços	(A+B+C+D)				
2014	0,9%	4,7%	5,7%	7,8%	19,1%				
2015	1,0%	4,9%	6,1%	8,6%	20,5%				
2016	1,0%	5,7%	6,6%	9,5%	22,8%				
2017	0,9%	5,3%	6,3%	8,9%	21,4%				
2018	1,0%	5,1%	6,3%	8,7%	21,1%				

Source: CEPEA.



Figure 4. Sample distribution by states

Ebitda/Receita Líquida									
Período	Média	Mediana	Desvio Padrão	Máximo	Mínimo				
2014	6,31%	5,32%	3,78%	17,17%	1,46%				
2015	6,92%	4,84%	5,57%	28,95%	1,16%				
2016	5,13%	4,89%	2,47%	11,91%	0,84%				
2017	6,77%	5,70%	5,95%	27,52%	0,52%				

Table 7. Descriptive Statistics of EBITDA / Net Revenue from 2014 to 2017

Source: Prepared by the author (2019).

Empresa	2014	2015	2016	2017	Média	Gráfico
Friato	17,17%	14,20%	9,44%	20,81%	15,41%	\sim
SLC	11,75%	13, 9 9%	7,14%	27,52%	15,10%	~/
EISA	13,67%	28,95%	1,01%	6,63%	12,56%	\sim
Agrária	7,86%	9, 4 1%	11,91%	13,78%	10,74%	
Cialne	12,48%	8,21%	4,70%	11,18%	9,14%	\sim
Coamo	7,82%	9, <mark>8</mark> 2%	8,38%	7,98%	8,50%	\sim
Coopavel	7,60%	10,04%	4,98%	7,34%	7,49%	\sim
Lar	6,79%	8,57%	6,07%	5,98%	6,85%	\sim
Comigo	5 ,6 4%	6,66%	6,43%	4,79%	5,88%	\sim
Cooxupé	8,10%	5,33%	6,64%	3,26%	5,83%	\sim
Cotrijal	4,57%	6,23%	6,05%	5,69%	5,63%	/
Cooperativa Integrada	4,88%	4,96%	5,48%	6,43%	5,44%	
Coasul	4 ,6 0%	3,76%	6,29%	6,92%	5,39%	~
Cotrisal	4,40%	4,72%	6,08%	6,34%	5,39%	-
Castrolanda	5,22%	4,47%	4,64%	5,85%	5,04%	\sim
Copercampos	5 ,9 6%	4,73%	4,80%	4,52%	5,00%	-
Cocamar	4,27%	5,02%	4,67%	5, 70%	4,92%	~
Copagril	5 ,6 0%	4,23%	4,18%	5,54%	4,89%	\sim
Capal	4,70%	4,44%	5,00%	3,90%	4,51%	\sim
Cotripal	5,43%	4,34%	3,84%	3,42%	4,26%	~
Copasul	3,41%	4,35%	3,62%	3,96%	3,84%	\sim
Copérdia	3,61%	4,54%	3,94%	2,98%	3,77%	\sim
Coagrisol	1,73%	2,61%	2,67%	2,40%	2,35%	
Agropan	2,58%	3,58%	0,84%	1,34%	2,08%	\sim
Coplacana	2,85%	1,16%	2,38%	0,52%	1,73%	$\sim\sim$
Cocatrel	1,46%	1,71%	2,17%	1,31%	1,66%	~

Liquidez corrente									
Período	Média	Mediana	Desvio Padrão	Mínimo	Máximo				
2014	1,34	1,32	0,30	0,83	2,14				
2015	1,35	1,32	0,29	0,84	2,13				
2016	1,32	1,32	0,35	0,72	2,18				
2017	1,37	1,26	0,32	0,98	2,24				

 Table 9. Descriptive Statistics of Current Ratio 2014 to 2017

Source: Prepared by the author (2019).

Table 10. Evolution of the Individual Current Ratio from 2014 to 2017

Empresa	2014	2015	2016	2017	Média	Gráfico
Comigo	2,14	1,96	1,99	2,24	2,08	\sim
Friato	1,85	2,13	2,18	1,69	1,96	\sim
Coamo	1,68	1,61	2,06	1,98	1,83	
Cotrisal	1,61	1,66	1,62	1,72	1,65	\sim
Cotripal	1,69	1,65	1,62	1,48	1,61	
Cooxupé	1,45	1,47	1,42	1,94	1,57	
Capal	1,45	1,49	1,48	1,50	1,48	\sim
EISA	1,49	1,46	1,38	1,34	1,42	
Castrolanda	1,47	1,35	1,35	1,47	1,41	\sim
Agrária	1,46	1,30	1,31	1,39	1,37	\searrow
SLC	1,25	1,34	1,33	1,48	1,35	
Agropan	1,37	1,39	1,33	1,30	1,35	\sim
Cocatrel	1,36	1,41	1,45	1,17	1,35	
Copasul	1,36	1,36	1,40	1,24	1,34	
Cocamar	1,27	1,27	1,22	1,21	1,24	
Coplacana	1,27	1,26	1,13	1,23	1,22	\sim
Cotrijal	1,19	1,20	1,03	1,23	1,16	\sim
Lar	1,13	1,28	1,10	1,11	1,16	\sim
Copagril	1,15	1,11	1,05	1,15	1,12	\sim
Copercampos	1,12	1,08	1,08	1,12	1,10	\sim
Cooperativa Integrada	1,11	1,08	1,08	1,09	1,09	\searrow
Cialne	0,96	1,30	0,72	1,27	1,06	\sim
Copérdia	1,03	1,05	1,08	1,09	1,06	
Coasul	1,00	1,00	1,03	1,12	1,04	
Coopavel	1,04	1,01	1,01	1,01	1,02	
Coagrisol	0,83	0,84	0,89	0,98	0,89	

Source: Prepared by the author (2019).

Table 11. Descriptive Statistics of the Indebted Debt Index 2014-2017

Período	Média	Mediana	Desvio Padrão	Mínimo	Máximo
2014	120,33%	96,60%	79,17%	9,90%	392,80%
2015	118,88%	95,75%	75,80%	7,30%	310,70%
2016	115,25%	102,90%	67,18%	3,50%	292,40%
2017	108,53%	116,40%	62,32%	1,20%	275,00%

Empresa	2014	2015	2016	2017	Média	Gráfico
Friato	9,90%	7,30%	3,50%	1,20%	5,48%	
Cotrisal	49,20%	26,80%	23,90%	15,90%	28,95%	-
Cotripal	31,00%	31,80%	30,70%	28,40%	30,48%	-
Coamo	56,30%	63,00%	41,50%	33,40%	48,55%	~
Comigo	64,70%	60,80%	48,60%	25,20%	49,83%	
Capal	80,60%	76,20%	80,80%	63,70%	75,33%	\sim
SLC	68,10%	96,00%	89,70%	69,50%	80,83%	\sim
Cotrijal	69,60%	69,50%	89,00%	101,90%	82,50%	
Castrolanda	76,30%	85,50%	102,20%	72,40%	84,10%	\sim
Cocatrel	90, 70%	63,00%	78,50%	119,70%	87,98%	\sim
Agropan	94,40%	95,50%	94,60%	73,10%	89,40%	
Cialne	57,10%	87,80%	103,60%	125,20%	93,43%	
Agrária	83,50%	87,50%	104,20%	111,00%	96,55%	
Copercampos	98,80%	92,10%	114,60%	113,10%	104,65%	\sim
Cocamar	110,70%	102,40%	134,70%	119,70%	116,88%	~~
Copérdia	155,30%	127,30%	111,80%	91,40%	121,45%	
Coagrisol	148,80%	115,00%	94,50%	138,00%	124,08%	\sim
EISA	145,10%	119,60%	92,10%	161,30%	129,53%	\sim
Copasul	144,20%	140,10%	138,60%	121,10%	136,00%	
Copagril	134,20%	160,80%	169,30%	182,40%	161,68%	
Cooperativa Integrada	162,60%	167,80%	161,10%	170,60%	165,53%	\sim
Lar	164,80%	180,80%	169,10%	182,30%	174,25%	\sim
Coasul	209, 10%	198,50%	168,40%	130,60%	176,65%	
Coplacana	197,90%	222,70%	225,20%	123,80%	192,40%	
Coopavel	232,90%	310,70%	234,00%	275,00%	263,15%	\sim
Cooxupé	392,80%	302,40%	292,40%	171,80%	289,85%	

Table 12. Evolution of the Individual Debt Ratio from 2014 to 2017

Source: Prepared by the author (2019).

Table 13. Descriptive Statistics of Net Margin 2014-2017

Margem Líquida								
Período Média Mediana Desvio Padrão Mínimo								
2014	3,57%	2,95%	2,26%	-0,10%	9,50%			
2015	3,11%	3,25%	2,12%	-1,00%	8,20%			
2016	2,47%	2,75%	3,05%	-9,40%	8,00%			
2017	3,10%	2,70%	3,24%	-5,60%	12,60%			

Source: Prepared by the author (2019).

Table 14. Individual Net Margin Evolution from 2014 to 2017

Empresa	2014	2015	2016	2017	Média	Gráfico
Friato	9,50%	8,20%	6,40%	12,60%	9,18%	\sim
Coamo	7,90%	8,10%	8,00%	7,20%	7,80%	
Cotrisal	4,30%	4,90%	5,70%	5,60%	5,13%	/
Agrária	3,70%	4,50%	4,50%	4,30%	4,25%	
Copérdia	6,20%	4,70%	2,70%	3,10%	4,18%	\sim
Cooxupé	5,10%	3,40%	4,60%	2,10%	3,80%	\sim
Cocamar	4,40%	3,80%	3,50%	3,40%	3,78%	
Cotripal	4,50%	3,90%	3,40%	2,30%	3,53%	
EISA	7,60%	-0,70%	3, <mark>0</mark> 0%	3,50%	3,35%	$\overline{}$
Capal	3,50%	3,10%	3,20%	3,40%	3,30%	$\overline{}$
Cotrijal	2,70%	4,40%	3,40%	2,50%	3,25%	\sim
Copasul	3,00%	4,00%	2,90%	2,90%	3,20%	\sim
Copercampos	4,20%	3,20%	2,80%	2,10%	3,08%	
Comigo	2,50%	3,60%	2,80%	2,90%	2,95%	\sim
Coasul	2,60%	3,30%	1,70%	4,00%	2,90%	\sim
SLC	1,70%	1,40%	-1,30%	9,7 0 %	2,88%	
Castrolanda	3,30%	2,20%	1,70%	2,90%	2,53%	\sim
Cooperativa Integrada	2,70%	2,30%	2,60%	2,40%	2,50%	$\sim\sim$
Lar	2,60%	2,70%	2,50%	2,00%	2,45%	
Agropan	2,10%	3,30%	1,90%	1,90%	2,30%	\sim
Coopavel	2,60%	1,90%	2,40%	1,20%	2,03%	\sim
Copagril	2,90%	1,70%	0,90%	1,80%	1,83%	\searrow
Coplacana	1,70%	1,50%	1,20%	1,30%	1,43%	\sim
Cocatrel	1,40%	1,70%	2,00%	0,40%	1,38%	-
Coagrisol	-0,10%	0,70%	1,00%	0, 70 %	0,58%	/
Cialne	0,10%	-1,00%	-9,40%	-5,60%	-3,98%	\sim

Rentabilidade do PL								
Período	Média	Mediana	Desvio Padrão	Mínimo	Máximo			
2014	13,02%	11,65%	8,58%	-0,90%	38,40%			
2015	11,80%	12,00%	7,08%	-3,50%	25,50%			
2016	10,25%	11,15%	9,64%	-29,00%	20,50%			
2017	10,43%	8,95%	9,79%	-16,30%	43,90%			

Table 15. PL profitability descriptive statistics (ROE)

Source: Prepared by the author (2019).

Empresa	2014	2015	2016	2017	Média	Gráfico
Friato	22,10%	25,50%	20,50%	43,90%	28,00%	
Coamo	20,60%	22,30%	20,40%	16,00%	19,83%	\frown
EISA	38,40%	-3,50%	17,10%	25,10%	19,28%	\searrow
Copérdia	28,80%	19,80%	11,40%	11,70%	17,93%	
Cotrisal	15,60%	18,70%	19,50%	17,00%	17,70%	\sim
Cooxupé	21,00%	18,30%	19,60%	8,00%	16,73%	-
Coasul	14,30%	18,90%	10,90%	17,90%	15,50%	\sim
Coopavel	17,70%	14,20%	17,50%	8,40%	14,45%	\sim
Cocamar	17,10%	15,00%	13,20%	12,30%	14,40%	~
Cotrijal	10,10%	17,40%	13,10%	10,30%	12,73%	\sim
Cooperativa Integrada	12,90%	12,00%	14,20%	11,50%	12,65%	$\sim \sim$
Capal	12,20%	12,00%	13,90%	12,30%	12,60%	\sim
Copasul	10,30%	14,10%	10,50%	10,50%	11,35%	\sim
Lar	11,10%	12,10%	11,60%	8,40%	10,80%	\frown
Copercampos	13,20%	11,30%	10,90%	6,60%	10,50%	
Agropan	10,80%	15,00%	8,50%	6,80%	10,28%	\sim
Agrária	8,80%	10,70%	10,50%	9,40%	9,85%	\frown
Copagril	14,10%	8,60%	4,60%	9,50%	9,20%	\sim
Cocatrel	9,40%	10,90%	14,10%	2,10%	9,13%	
Cotripal	10,20%	9,40%	8,50%	5,20%	8,33%	-
Comigo	5,50%	7,30%	7,30%	6,20%	6,58%	
Castrolanda	8,00%	5,60%	4,90%	7,60%	6,53%	\searrow
Coagrisol	-0,90%	6,40%	9,40%	7,10%	5,50%	
Coplacana	5,30%	5,60%	4,80%	5,30%	5,25%	\sim
SLC	1,70%	1,50%	-1,30%	8,50%	2,60%	~
Cialne	0.10%	-2.40%	-29.00%	-16.30%	-11.90%	~

Table 16. Individual ROE evolution from 2014 to 2017

Source: Prepared by the author (2019).

Table 17 - Descriptive Statistics on Return on Investment (ROI)

Período	Média	Mediana	Desvio Padrão	Mínimo	Máximo
2014	6,35%	5,13%	4,65%	-0,39%	20,11%
2015	6,19%	5,78%	5,22%	-1,61%	23,77%
2016	5,48%	5,11%	5,96%	-14,26%	19,78%
2017	6,20%	4,43%	8,52%	-7,25%	43,35%

_					/	- /
Empresa	2014	2015	2016	2017	Média	Gráfico
Friato	20,11%	23,77%	19,78%	43,35%	26,75%	
Cotrisal	10,47%	14,76%	15,75%	14,67%	13,91%	
Coamo	13,20%	13,69%	14,41%	11,99%	13,32%	
EISA	15,67%	-1,61%	8,89%	9,59%	8,13%	\sim
Copérdia	11,26%	8,73%	5,37%	6,09%	7,86%	~
Capal	6,77%	6,82%	7,70%	7,50%	7,20%	
Cotrijal	5,99%	10,29%	6,94%	5,08%	7,07%	\sim
Cocamar	8,13%	7,39%	5,62%	5,62%	6,69%	~
Cotripal	7,76%	7,18%	6,52%	4,06%	6,38%	-
Coasul	4,62%	6,33%	4,06%	7,75%	5,69%	\sim
Agropan	5,57%	7,67%	4,38%	3,94%	5,39%	\sim
Copercampos	6,61%	5,87%	5,06%	3,10%	5,16%	-
Cocatrel	4,93%	6,66%	7,88%	0,97%	5,11%	
Agrária	4,79%	5,69%	5,16%	4,47%	5,03%	\sim
Copasul	4,22%	5,88%	4,38%	4,75%	4,81%	\sim
Cooperativa Integrada	4,91%	4,48%	5,44%	4,25%	4,77%	\sim
Comigo	3,33%	4,56%	4,93%	4,99%	4,45%	/
Cooxupé	4,26%	4,55%	5,00%	2,93%	4,19%	-
Coopavel	5,33%	3,46%	5,25%	2,24%	4,07%	\sim
Lar	4,20%	4,31%	4,32%	2,97%	3,95%	-
Castrolanda	4,56%	3,02%	2,45%	4,38%	3,60%	\searrow
Copagril	6,00%	3,29%	1,71%	3,38%	3,59%	\sim
Coagrisol	-0,39%	2,98%	4,84%	2,97%	2,60%	
Coplacana	1,79%	1,73%	1,48%	2,38%	1,84%	
SLC	0,99%	0,76%	-0,69%	4,99%	1,51%	
Cialne	0,05%	-1,27%	-14,26%	-7,25%	-5,68%	\sim

Table 18 - Individual ROI evolution from 2014 to 2017

Source: Prepared by the author (2019).

Fable 19 - EVA d	lescriptive statis	stics in millions
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Período	Média	Mediana	Desvio Padrão	Mínimo	Máximo
2014	- 74,78	- 38,34	114,47	- 533,08	24,38
2015	- 131,34	- 77,33	165,21	- 808,60	17,98
2016	- 74,13	- 45,29	138,28	- 628,29	208,12
2017	- 32,83	- 32,12	77,74	- 179,07	228,04

Source: Prepared by the author (2019).

following two years with results 6.19% in 2015 and 5.48% in 2016 showing improvement in 2017 with 6.20%, but still lower to 2014. The standard deviation increased from 4.65% in 2014 to 8.52% in 2017 showing greater group heterogeneity.

Table 18 shows the evolution of this index in the period studied, showing the results of each company. Blue data show above average results and yellow below average results. Noteworthy are the companies Friato, Cotrisal, Coamo and Capal, which maintained above-average returns throughout the periods. The ordering of the data is by the average of the period presented in descending order. Regarding the behaviors per company, it is observed that 6 companies (Copérdia, Castrolanda, Copagril, Coplacana, SLC and Cialne), 23% of the sample, presented the same movement as the average, ie decrease of the index from 2014 to 2015, decrease from 2015 to 2016 and increase from 2016 to 2017.

The other companies presented varied results, therefore not similar. Among this group, one company stands out (with Me), which presented an increase in the index in all periods and three companies (Cocamar, Cotripal and Copercampos) that decreased this index in all periods.

Economic Value Added (EVA): EVA is an indicator that seeks to highlight whether a company generates value for its shareholders. Positive results show that there is value generation and negative results point to the destruction of shareholder value. It is noteworthy that in order to obtain this indicator, the CMPC (WACC) rates published by the Assaf Institute were used for companies classified in the "nature crops" sector because they better relate to the object of study. Thus, the rates were uniformly considered at 12.70% for 2014, 16.00% for 2015, 10.90% for 2016 and 8.30% for 2017.

Empresa		2014	201	5	2016		2017	Média	Gráfico
Coamo		24,38	- 137,54	81	208,12		228,04	80,75	\sim
Friato		19,41	17,98		23,25		84,09	36,18	
Cotrisal	-	8,44	- 4,74		21,64		30,96	9,86	
Cocatrel	-	14,20	- 13,88	-	5,55	-	15,89	- 12,38	
Coagrisol	=0	20,20	- 17,95		8,15	=0	9,87	- 14,04	
Agropan	-	16,78	- 23,15	-	19,66	÷	12,30	- 17,97	\sim
Copérdia		6,69	- 36,26	-	30,89	-	12,40	- 21,56	\sim
Capal	-	23,92	- 41,14	-	17,24	-	4,38	- 21,67	~
Cotripal	-	22,09	- 42,89	-	22,59	-	22,43	- 27,50	\sim
EISA		23,69	- 132, 13	-	13,01		8,56	- 28,22	\sim
Cotrijal	-	31,28	- 32,49	-	28,61	-	27,07	- 29,86	
Copasul	-	39,17	- 54,92	-	40,10	-	22,07	- 39,07	~
Coasul	-	47,59	- 64,05		43,91	-	4,15	- 39,93	
Copercampos	-	36,62	- 65,46	s a	46,68	-	47,03	- 48,95	\sim
Copagril	-	37,51	- 82,71	-	66,08	-	39,48	- 56,45	\sim
Cialne	-	46,71	- 71,94	÷	88,05	-	51,27	- 64,49	\sim
Coplacana	<u>19</u> 20	76,83	- 115,42	-	80,60	-	37,17	- 77,51	~
Coopavel		59,13	- 134,66	-	54,40	<u>1</u> 23	66,12	- 78,58	\sim
Cooperativa Integrada	-	81,35	- 136,90	-	72,12	- 1	60,38	- 87,69	\sim
Cocamar	- 1	68,37	- 142,59	-	113,20	-	59,93	- 96,02	\sim
Castrolanda	-	111,12	- 208,90	-	158,99	-	70,06	-137,27	\sim
Agrária	-	129,40	- 192,79	i -	131,13	-	98,93	-138,06	\sim
Comigo	-	184,73	- 236,97	° -	122,72	-	60,47	-151,22	~
Lar	-	158,92	- 295, 34		181,92	-	179,07	-203,81	\sim
Cooxupé	-	257,52	- 339,48	-	206,53	-	139,11	-235,66	~
SLC		533,08	- 808,60	-	628,29		165,66	-533,91	\sim

Table 20. Indivi	dual EVA evolutio	on from 2014 to 2017
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Prepared by the author (2019).

Table 21. Standard Index Summary Table

	ÍNDICES-PADRÃO DO AGRONEGÓCIO										
Ano	Ebitda/Ve ndas Líquidas	Liquidez corrente	Nível de endiv. Oneroso	Margem líquida	Rentab. do PL	ROI	EVA				
2014	6,31%	1,34	120,33%	3,57%	13,02%	6,35%	- 74,78				
2015	6,92%	1,35	118,88%	3,11%	11,80%	6,19%	- 131,34				
2016	5,13%	1,32	115,25%	2,47%	10,25%	5,48%	- 74,13				
2017	6,77%	1,37	108,53%	3,10%	10,43%	6,20%	- 32,83				
Gráfico	\sim	\sim		\sim		\sim	\sim				

Source: Prepared by the author (2019).

It can be observed in table 19 that the average of the studied companies showed value destruction in all periods, that is, even if the company made a profit it is not enough to remunerate the investor, means that the investment is worth less than capital invested in it therefore makes the investment less attractive. In 2014 the average result was -74.78 million, worsening in 2015 with a result of -131.34 million, in 2016 there is a recovery of the value approaching 2014 (-74.13 million) and in 2017 also There is an improvement in the average reaching -32.83 million, it is reiterated that even with this improvement the value is negative.

The standard deviation of the sample was 114.47 million in 2014, 165.21 million in 2015, 138.28 million in 2016 and 77.74 million in 2017. Table 20 shows the individual result by company for EVA. The companies Coamo, Friato, Cotrisal, Cocatrel, Coagrisol, Agropan, Copernia, Capal, Cotripal, EISA, Cotrijal, Copasul, Coasul and Copercampos for presenting above average results in at least three periods. However, it is noteworthy that only the company Friato obtained positive result (value creation for partner / shareholders) in all periods; Coamo company generated positive results in three periods.

Regarding behavior by company, it is observed that 20 companies (Coamo, Friato, Agropan, Coperia, Capal, Cotripal, EISA, Cotrijal, Copasul, Coasul, Copagril, Coplacana, Integrated Cooperative, Cocamar, Castrolanda, Agrarian, With Me, Home, Cooxupé, SLC), 77% of the sample, presented the same movement as the average, that is, a decrease in the index from 2014 to 2015, an increase from 2015 to 2016 and an increase from 2016 to 2017. similar. Among this group, one company stands out (Cotrisal), which presented an increase in the index in all periods. Through the techniques used and the results obtained, it can be inferred that the average results obtained through descriptive statistics can be considered as "standard indices" for the sector. It is known, however, that there may be distortions due to data limitation. Another variable that may be representative for the interpretation is the fact that a large part of the sample is from Cooperatives. Cooperatives are non-profit entities unlike business corporations in general. Its focus is on providing service to its members. However, it is noteworthy that the validity of the measured sectorial indicators is not discarded because all cooperatives and companies need to maintain levels of economic and financial viability that enable survival and competitiveness in the market. The success of both companies depends fundamentally on management and performance indicators are included in this context. From the above, table 21 was compiled compiling all calculated standard indices. The value of each standard index corresponds to the arithmetic mean calculated for each indicator and period.

In general, periods of crisis bring great difficulties for companies, but also opportunities. Opportunities to reevaluate business, practices, controls (strategic, tactical or operational) and the market. The systemic retraction of the economy verified in the studied period is reflected in the several indexes analyzed. Net Margin, Return on Equity (ROE), EBITDA, Current Liquidity, Return on Investment (ROI) and Economic Value Added (EVA) showed a deterioration in performance in 2015 and / or 2016 with resumption of growth or stabilization in 2017. The average onerous debt ratio fell in all periods, which may be explained by the fact that in times of crisis there is a reduction and increased credit in the market. The improvement in 2017 pointed to in all indicators relates to the end of the crisis period. Observing the individual companies, it is noted that some did not follow the trend shown by the sample average, with results oscillating in the periods marked by the crisis, which leads us to think that they had effective and proactive strategic positions and actions. The converse may be true. Regarding the similarity of results in relation to the average indices, we can see identical behavior and movement of 23% of the sample for EBITDA / Net Sales measure, 27% for the Current Liquidity Index, 27% for Interest Debt, 27%. for Net Margin, 19% for Return on Equity (ROE), 23% for Return on Investment (ROI) and 77% for Economic Value Added (EVA) measure.). There is a low level of similarity, below 30%, of almost all indicators, with the exception of EVA and, therefore, a high degree of nonsimilarity (different to average movements).

The similarity or non-similarity presented by the companies is due to the differentiation of management, vision, strategies and objectives of each one. These differentiating elements, in turn, are synthesized in each component contained in the index formulas. It was also identified that the EBITDA / Net Sales indicators and the Current Liquidity index showed a similar movement to that recorded in the Agriculture GDP (table 5),

ie, increased in 2015, reduced in 2016 and resumed growth in 2017. As stated above, approximately 85% of the sample is made up of non-profit Cooperatives. It is assumed that the indices that measure value generation, profitability and profitability, especially, may have a greater discrepancy when compared to companies that aim for profit, because as a rule the member does not seek in his cooperative the gain on the invested capital, but rather a form of association that helps him in the development of his productive activity. On the other hand, it is reiterated that the current level of market competitiveness demands an increasingly high level of professionalism, efficiency and effectiveness of its participants, constituting these attributes as essential for the survival of any organization. The studied indices were calculated through past data. They demonstrate usefulness to understand what happened, what performance was obtained and enable intrasectoral comparison. Looking at the past does not determine the future, but knowing the past helps in interpreting the present and identifying trends and planning for the future. The information calculated from the indicators is considered to be adequate. It is assumed that each one has limited information capacity, that is, by obtaining it, one obtains information about a specific aspect and to understand the other facets of a company, one needs to look for other indicators. For example, when determining the current liquidity ratio, we obtain the short-term liquidity situation (due to the use of current assets and liabilities only), but do not consider the long-term situation. Indexes, as syntheses, are control tools and assist in planning for efficient execution especially if used consistently. In this way, market swings can be anticipated or seen in time to correct directions. An organized and sustained management of such knowledge is able to more easily face and overcome business mishaps.

Conclusion

Strategic management indicators are tools present in the business management process. They are used to measure organizational performance, contribute to the interpretation of facts occurred, identify problems and seek alternative solutions. Therefore, they are sources of information for managers. The present study sought to answer the following question: What is the economic and financial performance of agribusiness companies in Brazil in 2014, 2015, 2016 and 2017 from the perspective of strategic indicators? From the results obtained through strategic indicators it can be seen that the economic and financial performance of the companies was affected in the crisis period that started in 2014 and lasted until early 2017 through the EBITDA indicators (expressed as EBITDA / Net Sales). rises from 2014 to 2015 by 0.61 points; in 2016 a decrease of 1.79 points and in 2017 showed an increase of 1.64 points, approaching the result obtained in 2015. The Current Liquidity Index showed less fluctuation, from 2014 to 2015 positive 0.01; 2015 to 2016 decreased by 0.03 points, rising again in 2017 by 0.05 points; the average debt-to-debt ratio fell in all periods to 11.80% in four years, which may be explained by the fact that in times of crisis there is a reduction and increased credit in the market; Net Margin indices decreased until 2016, with a loss of 1.1 points showing a slight recovery in 2017 when the index assumes a value of 3.10% approaching 2015. Return on Equity continued to fall until 2016, going from 13.02% in 2014 to 10.25%, showing a slightly positive reaction to the decrease of 10.43% (0.18 points increase) in 2017. Return on Investment (ROI) presented in 2014 a value of 6.35%, a negative change of 0.16

points from 2014 to 2015, declining another 0.71 points in 2016, returning in 2017 to a position similar to 2015 (an increase of 0.72 points); EVA was negative in all periods. In 2014 there was a destruction of value in the order of 74.78 million reais; in 2015, 131.34 million; In 2016, 74.13 million reacting and approaching the 2014 results and in 2017, following the recovery path, indicated destruction value of 32.83 million reais. In general, it can be said that the indicators had performance fluctuations in 2015 and / or 2016 with resumption of growth or stabilization in 2017. The objective of this study was to compare the results of the economic and financial indicators with similar or non-similar aspects. This was contemplated by generally observing the average trend lines for each calculated indicator. It is also considered that when observing the results of each company per year, not all followed the movement of the average. Regarding the similarities, we sought to identify companies that showed identical behavior to the expected trend (expressed through the arithmetic average) by the market determined for each indicator. Similar behavior and movement can be seen in 23% of the sample for EBITDA / Net Sales, 27% for Current Ratio, 27% for Interest Debt, 27% for Net Margin, 19% for Return on Equity. Equity (ROE), 23% for Return on Investment (ROI) and 77% for Economic Value Added (EVA) measure. There is a low level of similarity, below 30%, of almost all indicators, with the exception of EVA and, therefore, a high degree of non-similarity (different to average movements). The similarity or non-similarity presented by the companies is due to the differentiation of management, vision, strategies and objectives of each one. These differentiating elements, in turn, are synthesized in each component contained in the index formulas. It is also identified that only the EBITDA / Net Sales indicators and the Current Liquidity index showed a movement similar to that recorded in the Agriculture GDP (table 5), ie, increased in 2015, reduced in 2016 and resumed growth in 2017. It is worth mentioning that the study had limitations regarding the amount of financial information available in the database, which determined the choice of indicators contained in this research. The unavailability of data in the survey also resulted in a mathematical fit for calculating return on investment and economic value added indicators. Finally, each element studied contributed to the success in determining the economic and financial performance of the Agribusiness sector, specifically the Agriculture sector. The purpose of this paper is to contribute to instigate the use of strategic indicators and the awareness of the efficiency they represent.

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