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Stakeholder management: evidence on the performance of publicly traded companies

Gestão de stakeholders: evidências no desempenho das empresas de capital aberto

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ABSTRACT

Purpose: This study consists of empirical evidence from stakeholder management in the performance indicators of publicly traded companies.
Design/methodology/approach: The methodological framework was quantitative, and the Mann-Whitney U test was used in order to make comparisons between groups (with/without stakeholder management).
Findings: As a result, there is the empirical evidence of stakeholder management in the discussion of value creation and organizational performance.
Research implications: This study advances in the empirical discussion of the relationship between stakeholders and the company in the orientation of value creation, since it provides statistical evidence that the stakeholder management has influence on the performance of companies.
Research limitations: As a limitation, the study has the composition of the sectors, which can be expanded in future research, for all sectors of the BM&F Bovespa, including the 362 companies. A sample with several sectors can improve the inferences.
Practical implications: The study improves the understanding that it is not the fact that it belongs to the index, as it is the case of ISE-GRI, that the company's results point to a superior performance of those that do not belong, but the effective management of stakeholders for a positive result in the short and long term, as it was evidenced in this study.
Originality/value: It also demonstrates the empirical evidence of issues, until then dealt with in the theoretical field, but with no direct relationship with a set of companies, as well as supporting the idea that the creation of connections between companies and stakeholders open invisible opportunities for value creation.

Keywords: Management for stakeholders; Performance; Publicly traded companies

RESUMO

Objetivo: O objetivo desta pesquisa é evidenciar, empiricamente, a gestão de stakeholders nos indicadores de desempenho das empresas de capital aberto.
Metodologia: A partir de um enquadramento metodológico quantitativo, foi utilizado o teste Mann-Whitney U para realizar as comparações entre os grupos (com/sem gestão de stakeholders).
Resultados: Como resultado, tem-se a evidência estatística empírica da gestão de stakeholders na discussão da criação de valor e desempenho organizacional.
Implicações práticas: O estudo melhora o entendimento de que não é o fato de pertencer ao índice, como é o caso do ISE-GRI, que os resultados da empresa apontam desempenho superior das que não pertencem, mas sim da gestão efetiva de stakeholders para um resultado positivo a curto e em longo prazo, como foi evidenciado neste estudo.
Limitação: Como limitação o estudo tem a composição dos setores, que pode ser ampliado em pesquisas futuras, para todos os setores da BM&F Bovespa, incluindo as 362 empresas. Uma amostra com diversos setores pode melhorar as inferências.
Originalidade: O estudo demonstra evidências empíricas de questões, até então tratadas no campo teórico, mas sem relação direta com um conjunto de empresas, bem como ampara a ideia de que a criação de conexões entre empresa e stakeholders abrem oportunidades invisíveis para a criação de valor.

Palavras-chave: Gestão para os Stakeholders; Desempenho; Empresas de Capital Aberto

1 INTRODUCTION

Researchers in strategic management seek to explain and predict organizational success (Rumelt, Schendel, & Teece, 1991). In the development of this field, the concept of stakeholders played an important role in this discussion (Sarturi, 2016) and, recently, the theory of stakeholders (TS) resurfaced in the debate involving strategy and competitive advantage (Harrison, Bosse, & Phillips, 2010). Attention to stakeholders is a strategic issue for the company (Crilly & Sloan, 2012). The task of executives is to manage and shape relations between groups in a way that creates value for all stakeholders and not just shareholders (Hall, Millo, & Barman, 2015; Stocker, Arruda, Mascena, & Boaventura, 2020).

The value is a central issue at TS (Freeman, Harrison, Wicks, Pamar, & Colle, 2010). Some research has shown that attention has been focused on the theoretical discussion of value in the context of TS (Cintra, Costa, Amâncio-Vieira, & Ribeiro, 2015; Cintra, Cassol, & Costa, 2017; Cintra, Costa, Oliveira, & Cassol, 2017). Another aspect emphasizes issues related to the value created and distributed to stakeholders

(Sarturi, 2016; Sarturi, Seravalli, & Boaventura, 2015; Barbosa, 2018, 2019). TS has been providing evidence on the relationships between the stakeholder management and the corporate objectives (Jones, Wicks, & Freeman, 2017), i.e., it seeks to understand the cause and effect relationships between the organization and its stakeholders (Mascena & Stocker, 2020).

Research suggests the need to broaden the scope of the empirical analysis, which seeks to understand the relationship between the stakeholder treatment and the company's performance (Faleye & Trahan, 2011; Bosse & Coughlan, 2016; Bosse, Phillips, & Harrison, 2009). Whether focusing on the concept of value creation (Garriga, 2014; Mitchell, Van Buren, Greenwood, & Freeman, 2015); value creation dynamics (Garcia-Castro & Aguilera, 2015); and potential sources of value creation (Tantalo & Priem, 2016). The adoption of a stakeholder management and the organizational performance is an issue that needs to be furthered (Harrison & Bosse, 2013; Sarturi & Mascena, 2017). Understanding the factors that determine performance shows a research agenda in this field (Gomes, Osborne, & Guarnieiri, 2020).

Studies on value have shown theoretical advances and points of consensus (Sarturi, 2016). Although the literature advances (Garcia-Castro & Aguilera, 2015), challenges in future research are noted (Cintra et al., 2015; Cintra, Cassol, & Costa, 2017). One of these challenges is the expansion of quantitative research (Cintra et al., 2015), in view of the generalization of results, which are incipient (Cintra, Cassol, & Costa, 2017; Sarturi, 2016). Challenges that line up the study are: need for empirical evidence of TS as capable of producing value (Cintra et al., 2017), or superior performance (Harrison, Bosse, & Phillips, 2010); return to the emphasis of TS on strategic benefits in management (Cintra et al, 2017); deepening of the empirical evidence on the adoption of stakeholder management and performance (Harrison & Bosse, 2013; Sarturi & Mascena, 2017); detailed analysis based on the companies' annual reports (Dumitru, Guse, Feleaga, Mangiuc, & Feldioreaunu, 2015); and understanding of the empirical behavior of stakeholder service and company performance (Sarturi, 2016).

Based on these points, the research issue consists in analyzing: What is the impact of stakeholder management on the company's performance? To make the survey operational, it compared companies that manage or not the stakeholders in relation to the result obtained in the performance indicators (net revenue, ROA, EBITDA and net debt). Therefore, it aims to analyze empirically the relationship between the adoption of a stakeholder management and performance. The research seeks to demonstrate evidence of issues addressed so far in the theoretical field, but with no direct relationship with a set of companies. The paper was organized in five parts. Besides the introduction, there is a review of management for stakeholders and organizational performance. In the third part, there are the methodological procedures. In the fourth part, there are the presentation and discussion of the results. Finally, there are the conclusion, limitation, and appointment of future research.

2 STAKEHOLDER MANAGEMENT AND ORGANIZATIONAL PERFORMANCE

The stakeholder management guides simultaneous attention to stakeholders' interests (Donaldson & Preston, 1995). To do so, it is important to understand what their interests and motivations are and how they affect the business (Maignan & Ferrell, 2004). Freeman (1984) highlights that the stakeholder management occurs when you know who your stakeholders are and consider their interests in organizational processes and develop skills in order to balance the interests of stakeholders aiming to achieve organizational objectives.

Because of this, the TS has gained prominence as a perspective for discussion about strategy and creation of competitive advantage (Sarturi, Barakat, Mascena, & Fischmann, 2017) or performance (Gomes, Osborne, & Guarnieiri, 2020). The survival of the company depends on its ability to create and distribute sufficient value in order to meet the different expectations of stakeholders and ensure that they continue doing business with the company (Clarkson, 1995; Coff, 1999; Sarturi, Seravalli, & Boaventura,

2015). The creation of corporate value is increasingly influenced by externalities that go beyond market logic (Mio, 2020).

Research in this area highlights that there is a connection between the capacity of the relationship with stakeholders to bring competitive advantage to the company (Brito & Bernardi, 2010; Jones, Harrison, & Felps, 2018), and better performance (Harrison, Bosse, & Phillips, 2009, 2010; Tantalo & Priem, 2016). There is evidence of the importance and influence of stakeholders in the survival of the organization (Schiavoni, Moraes, de Castro, & Santos, 2013). Stakeholders have distinct relationships with the business and their perceptions regarding the company's performance need to be considered (Macêdo & Cândido, 2011).

The stakeholder management establishes that stakeholders, who are well treated, tend to retribute with positive attitudes and behaviors (Harrison, Freeman, & Abreu, 2015), which makes it a mechanism for achieving superior performance. Motivated by the intense competitiveness in the market, companies start to consider their relationship with their stakeholders in order to leverage relationships to obtain competitive advantage (Brandão, Diógenes, & Abreu, 2017).

Companies that meet the interests of stakeholders will be able to allocate more value to the organization in the long term (Harrison & Wicks, 2013) and will therefore perform better. There is a need for external agents (other stakeholders) to have closer and more friendly relationships, in order to make a correct management of stakeholders (Macêdo & Cândido, 2011). As the organization understands stakeholders as any group or individual that may affect or is affected by the achievement of the organization's objectives, the need for processes and techniques to enhance the management capacity increases (Freeman, 1984).

In this sense, it is believed that managers who relate to their stakeholders in a regime of mutual trust and cooperation will certainly achieve competitive advantage and superior performance (Brandão, Diógenes, & Abreu, 2017; Jones, 1995). It is the nexus of contracts between the stakeholder and the company that sustain the

relationship (Jones, 1995). Therefore, the company ceases to be the unit of analysis, while organizational interactions become generators of value and competitiveness (Brito & Bernardi, 2010).

It is observed that although there is theoretical evidence that the stakeholder management has a relationship with superior organizational performance and connection with organizational practice (Freeman, Phillips, & Sisoda, 2020), the empirical evidence from quantitative analysis is initial (Sarturi, 2016). The inclusion of the stakeholder management in the performance measurement model has not been widely tested, which reinforces the need for studies in this direction (Mascena & Stocker, 2020). The hypothesis is that companies that have a stakeholder management will have a superior performance when compared to companies that do not have a stakeholder management.

3 METHODOLOGICAL PROCEDURES

Based on the premise that financial measures reflect only part of the performance, that they have limitations, especially related to the time factor and that non-financial events are often the ones that determine changes in financial status (Vasconcelos, Yoshitake, & Nascimento, 2005), for the research, it uses the quantitative approach oriented to a 16-year time frame (2001-2016) and attributes the materiality matrix proposed by the Global Reporting Initiative (GRI) as the criterion for framing the company that has or not the management for the stakeholders (non-financial event), as well as the proxy evaluation that has the closest proximity to the stakeholder management (Mascena & Stocker, 2020).

The study was focused on the investigation of publicly traded companies listed at BM&F Bovespa, given that the information is available on the Economaticaâ database, as well as public reports and information on the investor relations portal or on the BM&F Bovespa website itself (Dutra, Pavinato, Carrer, Camargo, & Olea, 2021; Guimarães, Rover, & Ferreira, 2018; Souza, Brighenti & Hein, 2016). There are 362

companies of several sectors listed in the class common shares, these with the right to vote in the assemblies. The initial proposal was to analyze companies directly linked to the tourism sector, but only two companies were listed (small sample for statistical analysis). It was opted to amplify for all the companies of the industrial goods sectors, non-cyclic and cyclic consumption, justified having in mind that in its majority, these companies provide activities that make tangent or improve the condition of making the tourist activity. The idea of having three sectors meets the requirement that the sector can influence the behavior of the companies and has an aspect of the control variable in the comparison between the groups. When rescuing the control variables in empirical studies that have investigated performance, the most used are sector and company size (Boaventura, Silva, & Bandeira-de-Mello, 2012).

Materiality is among the three most innovative items within the reports (Mio, 2020) and as a proxy for the stakeholder management is aligned with recent research in the field and brings to light what really matters to stakeholders in resource allocation (Barbosa, 2018, 2019), stakeholder engagement (Stocker et al., 2020), dialogue with stakeholders (Campra, Esposito, & Lombardi, 2020; Hsu, Lee, & Chao, 2013; Torelli, Balluchi, & Furlotti, 2019). GRI is a multi-stakeholder organization that proposes a worldwide standard for producing management reports. By using these guidelines, organizations have the possibility to evaluate and compare their operations and practices through internationally accepted criteria. The form is formed by seven dimensions: general; nature of the product; corporate governance; economic-financial; social; environmental; and climate change (Sousa & Zucco, 2016).

The final sample was composed of 152 companies divided into three sectors: 51 of industrial goods; 81 of cyclic consumption; and 20 of non-cyclic consumption (Appendix A). Once the companies were defined, it was proceeded to the identification of which had the GRI materiality matrix, as well as which years they were carried out. For that, documentary research was used, considering that it investigated which ones had the matrix and the documents that prove the facts. In an initial analysis, the group

that had (49) and did not have (103) the GRI materiality matrix was compared. In the sequence, the same comparison was carried out for the three sectors (industrial goods, cyclic consumption, and non-cyclic consumption) in an isolated manner.

In order to make the comparison between the groups (with or without the matrix and sectors) the available values from 2001-2016 were used: net revenue; ROA; EBITDA; and net indebtedness. The use of these indicators is in the argument that: net revenue is important to start the managerial analysis of the company's result, as well as reflection on profit and performance (Sousa, Albuquerque, Rêgo, & Rodrigues, 2011); ROA measures the company's profit generation potential (Matarazzo, 2007) and it is used in empirical research to measure performance (Boaventura, Silva, & Bandeira-de-Mello, 2012; Sarturi, 2016); Among the accounting indicators used to measure the effectiveness of the organizational performance, the EBITDA stands out, because it shows the generation of resources considering only the operational activities, it eliminates the effects of non-disbursable expenses such as depreciation, amortization and exhaustion, besides showing the capacity of investments, payments to creditors and distribution of dividends to shareholders (Ritta, Jacomossi, Fabris, & Klann, 2017); and indebtedness may affect profit and restrict the behavior of managers (Barnett & Salomon, 2012; Drigo & Mendes Neto, 2017) and is relevant for long-term analysis (Souza, Brighenti, & Hein, 2016).

The information net revenue, ROA, EBITDA and net debt were collected from the Economatica® system. The system offers information about all the companies listed in the United States, Brazil, Argentina, Chile, Mexico, Peru, Colombia, and Venezuela. The database consists of several years' history of financial statements; daily share prices; earnings (dividends, splits, etc.); and name and participation of the main shareholders.

The following parameters were used to make the database: (a) t0 as the year of entry into the GRI and thus the first year of preparation of the materiality matrix; (b) t_before composed of t-1 (1 year before the entry for those who have the matrix or the most recent year for those who do not have the matrix), t-2 (2 years before the

entry for those who have the matrix or the second most recent year for those who do not have the matrix), t-3 (3 years before the entry for those who have the matrix or the third most recent year for those who do not have the matrix) and so on until t-16; (c) t_after composed of t1 (1st year after the entry for those who have the matrix), t2 (2nd year after the entry for those who have the matrix) and so on until t15. For the companies that did not have the matrix, the average of the whole period was used to compose the t_after, in order to proceed with the comparison of performances. In total there were 1,886 observations of net revenue, 1,908 of ROA, 1,781 of EBITDA and 1,915 of net debt.

In order to verify if the two groups (with and without the matrix) had significant differences in relation to the indicators, the Mann-Whitney U test was used. The value of U (statistic used in the test) is obtained by the number of times that a score in the group with n2 cases precedes a score in the group with n1 cases in the group ordered incrementally. The Mann-Whitney U test is a non-parametric alternative to the t-Student test, from which it is possible to compare the distribution functions of a variable in two samples, being indicated where there are heterogeneous variances, and reduced sample (Field, 2013; Marôco, 2011). Unlike the t-test, which tests the equality of means, the Mann-Whitney U test tests the distribution parameters. The U values calculated by the test evaluate the degree of data interlacing of the two groups after sorting. The greater separation of the data together indicates that the samples are distinct, rejecting the hypothesis of equality of the groups. For the tests, a significance level of 0.05 (p. <0.05) was adopted.

4 PRESENTATION AND ANALYSIS OF RESULTS

In order to demonstrate the quantitative evidence, it was decided to make comparisons between groups and sectors. For the comparison, the information was used to construct three periods t_before (average from t-1 to t-16), t0 (year of entry in GRI) and t_after (average from t1 to t15). The comparison is based on the premise that

the companies that carried out the matrix demonstrated guidance to the stakeholders, attending the management of stakeholders, even if in a partial way, considering that the process of consultation and discussion is oriented to the interests of the stakeholders, as they appear in the reports. The hypothesis is oriented so that the companies that have the stakeholder management will have superior performance in net revenue, ROA, EBITDA and lower indebtedness, independent of the sector in which it operates. In order to begin the quantitative evidence, the Mann-Whitney test was performed to compare the groups with the net revenue in the three periods (Figure 1).

Figure 1 – Mann-Whitney U test between groups, sectors and net revenue in the three periods

		Final Sample				Cyclic Consumption				Non-Cyclic Consumption				Industrial Goods			
Period	Group	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*
NR t_before	No	103	66.38	6837.00	0.000	60	37,45	2247.00	0.042	12	7.42	89.00	0.019	31	22.42	695.00	0.056
	With	45	93.09	4189.00		20	49,65	993.00		6	13.67	82.00		19	30.53	580.00	
RL t_0	No	103	63.03	6492.50	0.000	60	35,33	2120.00	0.000	12	8.00	96.00	0.043	31	20.29	629.00	0.001
	With	47	102.82	4832.50		21	57,19	1201.00		7	13.43	94.00		19	34.00	646.00	
NR t_after	No	102	58.19	5935.00	0.000	59	32,42	1913.00	0.000	12	7.17	86.00	0.002	31	19.23	596.00	0.000
	With	42	107.26	4505.00		16	58,56	937.00		8	15.50	124.00		18	34.94	629.00	

Source: Research results

From Figure 1, it is possible to affirm that there are significant differences at the level of at least 0.05 in the final sample for the group that carries out the materiality matrix as to the comparison of the performance in the net revenue, being superior for the group that carries out in the three periods: t_before (U = 1481.0; p = 0.000); t0 (U = 1136.5; p = 0.000); and t_after (U = 682.0; p = 0.000). It can be noted that the groups show significant differences, and the group that has the matrix tends to perform better than the group that does not have it.

By segmenting the comparison of the groups within the sector itself (cyclic consumption, non-cyclic consumption, and industrial goods) you can see that only the industrial goods sector at t_before showed no significant difference at the level of 0.05. The rest of the periods and other sectors showed significant differences at the level of 0.05. The Cyclic Consumption sector showed the values: t_before (U = 417.0; p = 0.042);

t0 (U = 290.0; p = 0.000); and t_after (U = 143.0; p = 0.000). The Non-cyclic consumption sector showed the values: t_before (U = 11.0; p = 0.019); t0 (U = 18.0; p = 0.043); and t_after (U = 8.0; p = 0.002). The industrial goods sector showed the values: t_before (U = 199.0; p = 0.056); t0 (U = 133.0; p = 0.001); and t_after (U = 100.0; p = 0.000).

It was possible to identify that the sector has interference in the performance behavior, because while in the final sample the performance of those who had the matrix grows and those who do not have it reduces. In this context, having management for stakeholders presents favorable results in terms of direct improvement in net revenue. On the verification by sector, the behavior wasn't uniform and neither there is a defined trend, considering that on the cyclic consumption was mirrored on the final sample, the non-cyclic consumption had growth of the group which doesn't have the matrix at t0 and industrial goods had growth at t_after too. It was possible to identify better performance for net income in all sectors of those who have the matrix, in other words, of those who have the stakeholder management. To have a stakeholder management reflects on the performance of net revenue in the short and long term. The second indicator to be tested was the ROA in the periods and with the groups (Figure 2).

Figure 2 – Mann-Whitney U test between groups, sectors and ROA in the three periods

		Final Sample				Cyclic Consumption				Non-cyclic Consumption				Industrial Goods			
Period	Group	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*
ROA	No	102	67.10	6844.00	0.002	59	37.73	2226.00	0.074	12	9.25	111.00	0.779	31	21.39	663.00	0.011
t_before	With	46	90.91	4182.00		21	48.29	1014.00		6	10.00	60.00		19	32.21	612.00	
ROA	No	102	66.74	6807.00	0.001	59	37.02	2184.00	0.025	12	10.33	124.00	0.349	31	21.23	658.00	0.008
t_0	With	46	91.72	4219.00		21	50.29	1056.00		6	7.83	47.00		19	32.47	617.00	
ROA	No	102	68.87	7025.00	0.104	59	35.93	2120.00	0.115	12	10.17	122.00	0.758	31	23.39	725.00	0.300
t_after	With	42	81.31	3415.00		16	45.63	730.00		8	11.00	88.00		18	27.78	500.00	

Source: Research results

From Figure 2, it is possible to affirm that there are significant differences at the level of 0.05 in the final sample for the group that performs the materiality matrix as to the comparison of the ROA at t_before (U = 1591.0; p = 0.002) and t0 (U = 1554.0; p = 0.001). It is noted, in the final sample, that the groups show differences, while at t_after

the group with the matrix shows superior performance, but there is no significant difference at the level of 0.05.

It is worth pointing out that, in the course of time, from the second year on, the group that performs the materiality matrix has a superior performance, but has no significant difference. This finding has already been highlighted by Garcia-Castro, Arino and Canela (2011), in an empirical discussion of the impact of the stakeholder management in the short and long term for shareholders, report negative effects in the short term, while finding positive effects in the long term.

It is possible to infer that having a stakeholder management causes a fairer ROA in the long term, that is, after the management is effective, the company's shares are channeled in returns beyond the shareholders, considering that the average rank of the test for the ROA was reduced in relation to previous periods for companies that have the materiality matrix, but even so it remains superior in relation to companies that do not have the matrix formalized.

By segmenting the comparison of groups within sectors you can see that the cyclic consumption did not show significant difference at the level of 0.05 at t_before and t_after, industrial goods at t_after and non-cyclic consumption in the three periods (t_before, t0 and t_after). The cyclic consumption showed significant difference at the level of 0.05 for t0 and industrial goods at t_before and t0. The cyclic consumption sector showed significant difference at the level of 0.05 for t_before and t_after. The cyclic consumption sector showed the values: t_before ($U = 456$; $p = 0.074$); t0 ($U = 414.0$; $p = 0.025$); and t_after ($U = 350.0$; $p = 0.115$). The non-cyclic consumption sector showed the values: t_before ($U = 33.0$; $p = 0.779$); t0 ($U = 26.0$; $p = 0.349$); and t_after ($U = 44.0$; $p = 0.758$). The industrial goods sector showed the values: t_before ($U = 167.0$; $p = 0.011$); t0 ($U = 162.0$; $p = 0.008$); and t_after ($U = 229.0$; $p = 0.300$).

It was possible to identify that there is no uniform behavior and no defined trend. It identified better performance for ROA in all sectors of those who have the materiality matrix, i.e., those who have the management of stakeholders. A reduction

in the average ROA rank at t_after, which may indicate a fairer value creation and distribution relationship for other stakeholders, being beyond the exclusive interests of shareholders. It is possible to infer that having a stakeholder management causes a higher positive impact on the ROA in the short and fairer in the long term. The third indicator to be tested was EBITDA in the periods and groups (Figure 3).

Figure 3 – Mann-Whitney U test groups, sectors and EBITDA in the three periods

		Final Sample				Cyclic Consumption				Non-cyclic Consumption				Industrial Goods			
Period	Group	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*
Ebitda t_before	No	102	63.32	6459.00	0.000	59	35.46	2092.00	0.005	12	8.25	99.00	0.160	31	20.35	631.00	0.001
	With	44	97.09	4272.00		19	52.05	989.00		6	12.00	72.00		19	33.89	644.00	
Ebitda t_0	No	102	61.07	6229.00	0.000	59	35.58	2099.00	0.001	12	7.25	87.00	0.011	31	19.06	591.00	0.000
	With	45	103.31	4649.00		21	54.33	1141.00		6	14.00	84.00		18	35.22	634.00	
Ebitda t_after	No	102	59.53	6072.00	0.000	59	32.61	1924.00	0.000	12	7.83	94.00	0.014	31	19.97	619.00	0.001
	With	42	104.00	4368.00		16	57.88	926.00		8	14.50	116.00		18	33.67	606.00	

Source: Research results

From Figure 3 it is possible to affirm that there are significant differences at the level of 0.05 in the final sample for the group that carries out the materiality matrix as to the comparison of the EBITDA, being superior for the group that carries out in the three periods: t_before (U = 1206.0; p = 0.000); t0 (U = 976.0; p = 0.000); and t_after (U = 819.0; p = 0.000). It can be seen in the final sample that the groups show important differences, while the group that has the matrix tends to improve the EBITDA performance, the group that does not have the matrix tends to get worse. It is possible to infer that having a stakeholder management causes a positive impact on EBITDA. In other words, the stakeholder management has an influence on the generation of resources, as well as on the improvement of investment capacity, payments to creditors and distribution of dividends to shareholders.

By segmenting the comparison of the groups inside the own sector, you can verify that only the non-cyclic consumption sector at t_before did not show significant difference at 0.05 level. The rest of the periods and other sectors showed significant differences at the level of 0.05. The cyclic consumption sector showed the values: t_

before (U = 322.0; p = 0.005); t0 (U = 329.0; p = 0.001); and t_after (U = 154.0; p = 0.000). The non-cyclical consumption sector showed the values: t_before (U = 21.0; p = 0.160); t0 (U = 9.0; p = 0.011); and t_after (U = 16.0; p = 0.014). The industrial goods sector showed the values: t_before (U = 135.0; p = 0.001); t0 (U = 95.0; p = 0.000); and t_after (U = 123.0; p = 0.001).

It was possible to identify that the sector has interference on the behavior of the EBITDA performance, because while in the final sample the performance of those who had the matrix grows and those who do not have the matrix reduces, when looking at the sector, the behavior was not uniform, and there is not a defined trend, since in the cyclic consumption was mirrored in the final sample, the non-cyclic consumption of industrial goods there was growth of the group that does not have the matrix at t0, but did not have identical behavior at t_after. It was possible to identify better performance for the EBITDA in all sectors of those who have the management of stakeholders (with the materiality matrix). It is possible to infer that maintaining a relationship with stakeholders has a positive and superior impact on EBITDA at t0 and t_after, which reinforces the superior performance of companies that manage stakeholders. The last indicator to be tested was net debt in the periods and groups (Figure 4). It is worth noting that the companies with the best performance are those with the lowest debt levels (Mendes & Santos, 2018).

Figure 4 – Mann-Whitney U test groups, sectors and net debt in the three periods

		Final Sample				Cyclic Consumption				Non-cyclic Consumption				Industrial Goods			
Period	Group	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*	N	*Mean Rank*	*Sum of Ranks*	*p. value*
NI t_before	No	103	69.77	7186.00	0.042	60	39.35	2361.00	0.443	12	7.58	91.00	0.031	31	23.87	740.00	0.313
	With	45	85.33	3840.00		20	43.95	879.00		6	13.33	80.00		19	28.16	535.00	
NI t_0	No	103	68.84	7091.00	0.009	60	40.50	2430.00	0.746	12	7.17	86.00	0.009	31	22.32	692.00	0.049
	With	46	88.78	4084.00		21	42.43	891.00		6	14.17	85.00		19	30.68	583.00	
NI t_after	No	103	64.99	6694.00	0.000	60	37.58	2255.00	0.483	12	8.17	98.00	0.031	31	20.19	626.00	0.002
	With	42	92.64	3891.00		16	41.94	671.00		8	14.00	112.00		18	33.28	599.00	

Research results

From Figure 4, it is possible to affirm that there are significant differences at the level of 0.05 in the final sample for the group that carries out the materiality matrix

as to the comparison of net indebtedness, being superior for the group that carries out in the three periods: t_before (U = 1830.0; p = 0.042); t0 (U = 1735.0; p = 0.009); and t_after (U = 1338.0; p = 0.000). It can be seen in the final sample that the groups show important differences, while the group that has the matrix tends to improve the performance of the net indebtedness, the group that does not perform tends to get worse. It is possible to infer that the stakeholder management causes a positive impact on indebtedness. In other words, the results confirmed that the indebtedness restricts the behavior of managers towards stakeholders and, therefore, it is feasible that companies that have the matrix tend to have a favorable performance in relation to indebtedness.

By segmenting the comparison of the groups within the sector itself, you can see that the cyclic consumption sector did not show a significant difference at the level of 0.05 for any of the three periods, while in the industrial goods sector it was only at t_before. The rest of the periods and sectors showed significant differences at the level of 0.05. The cyclic consumption showed the values: t_before (U = 531.0; p = 0.443); t0 (U = 600.0; p = 0.746); and t_after (U = 435.0; p = 0.483). The non-cyclic consumption sector showed the values: t_before (U = 13.0; p = 0.031); t0 (U = 8.0; p = 0.009); and t_after (U = 20.0; p = 0.031). The industrial goods sector showed the values: t_before (U = 244.0; p = 0.313); t0 (U = 196.0; p = 0.049); and t_after (U = 130.0; p = 0.002).

It was possible to identify that the sector has interference in the behavior of the debt performance, because while in the final sample the performance of those who had the matrix grows and those who do not have the matrix decreases, when looking at the sector, the behavior was not uniform and there is not a defined trend. It identified better performance for indebtedness in all sectors of those who have the management of stakeholders (with the matrix). The materiality matrix relates to the performance and importance of managing primary stakeholder groups to obtain results (Barbosa, 2019) and that the inclusion of stakeholders in the management process brings competitive advantages to organizations (Stocker & Mascena, 2019). It

inferred that maintaining a relationship with stakeholders has a positive impact on net indebtedness, but that for some sectors the difference is not significant. This finding may be associated with the idea that indebtedness is influenced by exogenous and endogenous variables (Mendes & Santos, 2018).

Finally, it was possible to infer that the stakeholder management has a positive impact on net revenue, EBITDA, ROA and net indebtedness (here, inverted thinking in relation to other indicators, because the lower the indebtedness, the better the result), being superior in companies that have the materiality matrix. Even if in some cases there is no significant difference at the level of 0.05, there is statistical evidence that shows that the values of the group with the materiality matrix (stakeholder management) are higher than the values of the group without the matrix. These results suggest that the materiality matrix can be a useful and positive tool for companies that intend to strengthen their relationship with stakeholders. It also showed that the sector can influence differences between groups, but always with higher values for the group that has the materiality matrix, i.e., that has the stakeholder management orientation.

The idea that stakeholder management can be correlated with the organization's performance was evidenced in the study and, therefore, the study brings new empirical inclinations to the field of stakeholder theory. In other words, as evidenced by Stocker, Sarturi and Barakat (2020:12): "an important premise of the stakeholder literature refers to the expectation that companies that manage their stakeholders superiorly also present superior financial performance", as evidenced by empirically in this research.

5 CONCLUSIONS

From the results of this study, it was possible to understand, quantitatively, that there is a relationship of improvement in the organizational performance of companies that have the stakeholder management. In other words, it brings empirical evidence that stakeholder management unlocks and enhances value creation (Harrison, Bosse,

& Phillips, 2010), as well as being positively related to the company's performance (Bridoux & Stoelhorst, 2014; Harrison, Bosse, & Phillips, 2010), in view of the best results and significant statistical relationship.

The study contributes with empirical evidence of the stakeholder management in the context of value creation, because although previous studies have investigated the relationship of indicators in the context of sustainable actions or social responsibility, the insertion of the stakeholder management variable to understand value creation is unprecedented. It empirically supports the idea that the creation of connections between companies and stakeholders open invisible opportunities for value creation (Camilleri, 2012), as well as contributing with evidence of the existence of a direct relationship between the stakeholder management and the superior organizational performance, given the highlight of Bridoux and Stoelhorst (2014), Harrison, Bosse and Phillips (2010) and Harrison and Bosse (2013).

The study improves the understanding that it is not the fact that it belongs to the index, as it is the case of ISE-GRI (Maia, Carvalho, Klotzle, Pinto, & Motta, 2017), that the company's results point to a superior performance of those that do not belong, but the effective management of stakeholders for a positive result in the short and long term, as it was evidenced in this study. The implications of this study lead to important insights into the use of the materiality matrix, contained in sustainability reports or integrated reports, as a step towards integral stakeholder management, with the emphasis on the fact that primary stakeholders have a greater influence on the organization's processes and actions than secondary stakeholders.

As a limitation, the study has the composition of the sectors, which can be expanded in future research, for all sectors of the BM&F Bovespa, including the 362 companies. A sample with several sectors can improve the inferences. It is suggested to perform other statistical tests, such as regression, including other characteristics such as size, GRI entry time, materiality matrix execution time, and other characteristics, which could also include other control variables (company size, GRI time, materiality

matrix execution time, and others). An alternative way of future research would be to try to relate the stakeholder management beyond the materiality matrix, in order to complement the results of this study and to highlight whether or not the behavior of the field resembles the results of this study. Therefore, strategies and stakeholder groups are not similar and should not be understood as a single block.

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Contribution	[Author 1]	[Author 2]	[Author 3]	[Author 4]
1. Definition of research problem	√			√
2. Development of hypotheses or research questions (empirical studies)	√	√		√
3. Development of theoretical propositions (theoretical work)	√			√
4. Theoretical foundation / Literature review	√		√	
5. Definition of methodological procedures	√	√		
6. Data collection	√	√		
7. Statistical analysis	√	√		
8. Analysis and interpretation of data	√			√
9. Critical revision of the manuscript	√	√	√	√
10. Manuscript writing	√		√	

Conflict of Interest
The authors have stated that there is no conflict of interest.

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APPENDIX

Appendix – Quantitate Research Basis

Continue...

	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
1	Aco Altona	ON	Ação	EALT3	BR	Bens Industriais	244,566		2014-2016	3
2	Aliperti	ON	Ação	APTI3	BR	Consumo não Cíclico	425,034			
3	All Norte	ON	Ação	FRRN3B	BR	Bens Industriais	9,757,028			
4	Alpargatas	ON	Ação	ALPA3	BR	Consumo Cíclico	3,782,052			
5	Ambev	ON	Ação	ABEV3	BR	Consumo não Cíclico	83,841,418	Yes	2006-2016	11
6	Anima	ON	Ação	ANIM3	BR	Consumo Cíclico	1,387,852			
7	Arezzo Co	ON	Ação	ARZZ3	BR	Consumo Cíclico	907,148	Yes	2011-2012	2
8	Azevedo	ON	Ação	AZEV3	BR	Bens Industriais	159,365			
9	B2W Digital	ON	Ação	BTOW3	BR	Consumo Cíclico	10,241,349	Yes	2011-2016	6
10	Bahema	ON	Ação	BAHI3	BR	Consumo Cíclico	96,454			
11	Bardella	ON	Ação	BDLL3	BR	Bens Industriais	902,838			
12	Bic Monark	ON	Ação	BMKS3	BR	Consumo Cíclico	216,515			
13	Biosev	ON	Ação	BSEV3	BR	Consumo não Cíclico	10,288,597	Yes	2011-2016	6
14	Bk Brasil	ON	Ação	BKBR3	BR	Consumo Cíclico	1,428,462			

Appendix – Quantitate Research Basis

Continue...

	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
15	Bombril	ON	Ação	BOBR3	BR	Consumo não Cíclico	711,114	Yes	2014-2015	2
16	BR Home	ON	Ação	HCBR3	BR	Consumo Cíclico	309,894			
17	Brasilagro	ON	Ação	AGRO3	BR	Consumo não Cíclico	883,293			
18	BRF	ON	Ação	BRFS3	BR	Consumo não Cíclico	42,944,936	Yes	2008-2016	9
19	Cambuci	ON	Ação	CAMB3	BR	Consumo Cíclico	224,018			
20	CCR	ON	Ação	CCRO3	BR	Bens Industriais	24,555,847	Yes	2006-2016	11
21	Cedro	ON	Ação	CEDO3	BR	Consumo Cíclico	527,224	Yes	2010-2010	1
22	Cia Hering	ON	Ação	HGTX3	BR	Consumo Cíclico	1,528,691	Yes	2013-2016	4
23	Cinesystem	ON	Ação	CNSY3	BR	Consumo Cíclico	105,466			
24	Conc Rio Ter	ON	Ação	CRTE3B	BR	Bens Industriais	256,635			
25	Const A Lind	ON	Ação	CALI3	BR	Consumo Cíclico	46,246			
26	Contax	ON	Ação	CTAX3	BR	Bens Industriais	2,142,656			
27	Cosan Log	ON	Ação	RLOG3	BR	Bens Industriais	23,038,008			
28	Coteminas	ON	Ação	CTNM3	BR	Consumo Cíclico	3,338,866			
29	Cr2	ON	Ação	CRDE3	BR	Consumo Cíclico	230,247			
30	Csu Cardsyst	ON	Ação	CARD3	BR	Bens Industriais	354,459			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
31	Ctc	ON	Ação	CTCA3	BR	Consumo Cíclico	812,958			
32	Cvc Brasil	ON	Ação	CVCB3	BR	Consumo Cíclico	3,328,429			
33	Cyrela Realt	ON	Ação	CYRE3	BR	Consumo Cíclico	11,879,699			
34	Direcional	ON	Ação	DIRR3	BR	Consumo Cíclico	4,089,767			
35	Dohler	ON	Ação	DOHL3	BR	Consumo Cíclico	641,824			
36	Dtcom-Direct	ON	Ação	DTCY3	BR	Bens Industriais	24,604			
37	Dufry AG	ON	Ação	DAGB33	BR	Consumo Cíclico	31,758,230			
38	Ecorodovias	ON	Ação	ECOR3	BR	Bens Industriais	6,603,407	Yes	2007-2016	10
39	Embraer	ON	Ação	EMBR3	BR	Bens Industriais	38,016,671	Yes	2009-2016	8
40	Encorpar	ON	Ação	ECPR3	BR	Consumo Cíclico	278,329			
41	Estacio Part	ON	Ação	ESTC3	BR	Consumo Cíclico	4,141,152			
42	Estrela	ON	Ação	ESTR3	BR	Consumo Cíclico	227,687			
43	Eternit	ON	Ação	ETER3	BR	Bens Industriais	842,448	Yes	2008-2016	9
44	Even	ON	Ação	EVEN3	BR	Consumo Cíclico	5,018,723	Yes	2008-2016	9
45	Excelsior	ON	Ação	BAUH3	BR	Consumo não Cíclico	69,969			
46	Eztec	ON	Ação	EZTC3	BR	Consumo Cíclico	3,516,165			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
47	Forja Taurus	ON	Ação	FJTA3	BR	Bens Industriais	893,057	Yes	2013-2014	2
48	Fras-Le	ON	Ação	FRAS3	BR	Bens Industriais	1,202,304			
49	Gafisa	ON	Ação	GFSA3	BR	Consumo Cíclico	5,210,089	Yes	2011-2011	1
50	Grazziotin	ON	Ação	CGRA3	BR	Consumo Cíclico	643,833,163			
51	Grendene	ON	Ação	GRND3	BR	Consumo Cíclico	3,253,820			
52	Guararapes	ON	Ação	GUAR3	BR	Consumo Cíclico	7,678,922			
53	Haga	ON	Ação	HAGA3	BR	Bens Industriais	57,554,674			
54	Helbor	ON	Ação	HBOR3	BR	Consumo Cíclico	5,359,180			
55	Hercules	ON	Ação	HETA3	BR	Consumo Cíclico	8,424			
56	Hoteis Othon	ON	Ação	HOOT3	BR	Consumo Cíclico	576,959			
57	Imc	ON	Ação	MEAL3	BR	Consumo Cíclico	1,503,408			
58	Ind Cataguas	ON	Ação	CATA3	BR	Consumo Cíclico	263,353	Yes	2011-2011	1
59	Inds Romi	ON	Ação	ROMI3	BR	Bens Industriais	1,084,120	Yes	2009-2013	5
60	Inepar	ON	Ação	INEP3	BR	Bens Industriais	2,285,555			
61	Invepar	ON	Ação	IVPR3B	BR	Bens Industriais	25,581,884	Yes	2009-2016	8
62	Iochp-Maxion	ON	Ação	MYPK3	BR	Consumo Cíclico	7,057,115			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
63	JBS	ON	Ação	JBSS3	BR	Consumo não Cíclico	102,815,763	Yes	2012-2016	5
64	JHSF Part	ON	Ação	JHSF3	BR	Consumo Cíclico	4,750,550			
65	Joao Fortes	ON	Ação	JFEN3	BR	Consumo Cíclico	2,641,547			
66	Josapar	ON	Ação	JOPA3	BR	Consumo não Cíclico	1,667,337			
67	JSL	ON	Ação	JSLG3	BR	Bens Industriais	8,868,383	Yes	2010-2016	7
68	Karsten	ON	Ação	CTKA3	BR	Consumo Cíclico	314,602	Yes	2006-2015	10
69	Kepler Weber	ON	Ação	KEPL3	BR	Bens Industriais	763,805	Yes	2012-2015	4
70	Kroton	ON	Ação	KROT3	BR	Consumo Cíclico	17,601,065	Yes	2014-2016	3
71	Le Lis Blanc	ON	Ação	LLIS3	BR	Consumo Cíclico	3,179,649			
72	Localiza	ON	Ação	RENT3	BR	Consumo Cíclico	7,417,255	Yes	2016-2016	1
73	Locamerica	ON	Ação	LCAM3	BR	Consumo Cíclico	2,182,333			
74	Log-In	ON	Ação	LOGN3	BR	Bens Industriais	1,857,719			
75	Lojas Americ	ON	Ação	LAME3	BR	Consumo Cíclico	20,775,991	Yes	2013-2016	4
76	Lojas Marisa	ON	Ação	AMAR3	BR	Consumo Cíclico	2,644,049			
77	Lojas Renner	ON	Ação	LREN3	BR	Consumo Cíclico	6,475,212	Yes	2010-2016	7
78	M.Diasbranco	ON	Ação	MDIA3	BR	Consumo não Cíclico	5,681,045			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
79	Maestroloc	ON	Ação	MSRO3	BR	Consumo Cíclico	121,582			
80	Magaz Luiza	ON	Ação	MGLU3	BR	Consumo Cíclico	6,100,606	Yes	2012-2016	5
81	Marcopolo	ON	Ação	POMO3	BR	Bens Industriais	4,968,269	Yes	2012-2015	4
82	Marfrig	ON	Ação	MRFG3	BR	Consumo não Cíclico	20,258,803	Yes	2010-2016	7
83	Melhor SP	ON	Ação	MSPA3	BR	Consumo Cíclico	1,632,577			
84	Mendes Jr	ON	Ação	MEND3	BR	Bens Industriais	959,574	Yes	2009-2013	5
85	Metal Leve	ON	Ação	LEVE3	BR	Consumo Cíclico	2,354,914			
86	Metalfrio	ON	Ação	FRIO3	BR	Bens Industriais	1,098,571			
87	Metisa	ON	Ação	MTSA3	BR	Bens Industriais	316,950,097			
88	Mills	ON	Ação	MILS3	BR	Bens Industriais	1,510,747			
89	Minasmaquinas	ON	Ação	MMAQ3	BR	Bens Industriais	154,500			
90	Minerva	ON	Ação	BEEF3	BR	Consumo não Cíclico	8,959,148	Yes	2011-2016	6
91	Minupar	ON	Ação	MNPR3	BR	Consumo não Cíclico	208,152			
92	Movida	ON	Ação	MOVI3	BR	Consumo Cíclico	2,789,713			
93	Mrs Logist	ON	Ação	MRSA3B	BR	Bens Industriais	7,572,805	Yes	2013-2013	1
94	MRV	ON	Ação	MRVE3	BR	Consumo Cíclico	12,419,105	Yes	2011-2016	6

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
95	Multiplus	ON	Ação	MPLU3	BR	Consumo Cíclico	1,751,446	Yes	2014-2016	3
96	Mundial	ON	Ação	MNDL3	BR	Consumo Cíclico	952,144	Yes	2013-2016	4
97	Nadir Figuei	ON	Ação	NAFG3	BR	Consumo Cíclico	612,488			
98	Natura	ON	Ação	NATU3	BR	Consumo não Cíclico	8,421,579	Yes	1999-2015	17
99	Nordon Met	ON	Ação	NORD3	BR	Bens Industriais	15,589			
100	Oderich	ON	Ação	ODER3	BR	Consumo não Cíclico	395,425			
101	P.Acucar-Cbd	ON	Ação	PCAR3	BR	Consumo não Cíclico	45,217,000			
102	PDG Realt	ON	Ação	PDGR3	BR	Consumo Cíclico	4,651,014			
103	Pettenati	ON	Ação	PTNT3	BR	Consumo Cíclico	422,858,379			
104	Plascar Part	ON	Ação	PLAS3	BR	Consumo Cíclico	581,418			
105	Pomifrutas	ON	Ação	FRTA3	BR	Consumo não Cíclico	92,735			
106	Portobello	ON	Ação	PTBL3	BR	Bens Industriais	1,237,360			
107	Priner	ON	Ação	PRNR3	BR	Bens Industriais	121,565			
108	Prumo	ON	Ação	PRML3	BR	Bens Industriais	7,808,106			
109	Randon Part	ON	Ação	RAPT3	BR	Bens Industriais	4,868,291	Yes	2008-2014	7
110	Recrusul	ON	Ação	RCSL3	BR	Bens Industriais	47,984			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
111	Riosulense	ON	Ação	RSUL3	BR	Bens Industriais	166,643			
112	Rni	ON	Ação	RDNI3	BR	Consumo Cíclico	1,578,022			
113	Rossi Resid	ON	Ação	RSID3	BR	Consumo Cíclico	4,817,364	Yes	2009-2010	2
114	Rumo	ON	Ação	RAIL3	BR	Bens Industriais	23,031,314	Yes	2016-2016	1
115	Santanense	ON	Ação	CTSA3	BR	Consumo Cíclico	435,999			
116	Santos Brp	ON	Ação	STBP3	BR	Bens Industriais	1,893,843	Yes	2012-2016	5
117	Sao Martinho	ON	Ação	SMTO3	BR	Consumo não Cíclico	8,691,883			
118	Saraiva Livr	ON	Ação	SLED3	BR	Consumo Cíclico	1,333,877			
119	Sauipe	ON	Ação	PSEG3	BR	Consumo Cíclico	365,705			
120	Schulz	ON	Ação	SHUL3	BR	Bens Industriais	936,439			
121	Ser Educa	ON	Ação	SEER3	BR	Consumo Cíclico	2,018,564			
122	SLC Agricola	ON	Ação	SLCE3	BR	Consumo não Cíclico	5,453,376			
123	Smiles	ON	Ação	SMLS3	BR	Consumo Cíclico	2,098,198	Yes	2013-2013	1
124	Somos Educa	ON	Ação	SEDU3	BR	Consumo Cíclico	3,476,280			
125	Sondotecnica	ON	Ação	SOND3	BR	Bens Industriais	79,011			
126	Springs	ON	Ação	SGPS3	BR	Consumo Cíclico	2,629,673			

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	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
127	SPturis	ON	Ação	AHEB3	BR	Consumo Cíclico	266,614			
128	Stara	ON	Ação	STTR3	BR	Bens Industriais	576,311			
129	Technos	ON	Ação	TECN3	BR	Consumo Cíclico	742,508			
130	Tecnisa	ON	Ação	TCSA3	BR	Consumo Cíclico	3,128,240	Yes	2008-2016	9
131	Tecnosolo	ON	Ação	TCNO3	BR	Bens Industriais	243,385			
132	Tectoy	ON	Ação	TOYB3	BR	Consumo Cíclico	28,299			
133	Tegma	ON	Ação	TGMA3	BR	Bens Industriais	828,122			
134	Teka	ON	Ação	TEKA3	BR	Consumo Cíclico	949,582			
135	Tenda	ON	Ação	TEND3	BR	Consumo Cíclico	1,862149			
136	Terra Santa	ON	Ação	TESA3	BR	Consumo não Cíclico	2,102,087			
137	Tex Renaux	ON	Ação	TXRX3	BR	Consumo Cíclico	183,946			
138	Time For Fun	ON	Ação	SHOW3	BR	Consumo Cíclico	538,390			
139	Trevisa	ON	Ação	LUXM3	BR	Bens Industriais	187,566			
140	Trisul	ON	Ação	TRIS3	BR	Consumo Cíclico	871,065			
141	Triunfo Part	ON	Ação	TPIS3	BR	Bens Industriais	4,974,355	Yes	2012-2016	5
142	Tupy	ON	Ação	TUPY3	BR	Bens Industriais	4,769,806			

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Conclusion

	Company	Class	Type	Code	Host	Economic Sector	Total Asset 2016 (k)	Materiality Matrix	Period Reports	Reporting Time
143	Unicasa	ON	Ação	UCAS3	BR	Consumo Cíclico	233,720			
144	Valid	ON	Ação	VLID3	BR	Bens Industriais	2,074,697	Yes	2011-2012	2
145	Viavarejo	ON	Ação	VVAR3	BR	Consumo Cíclico	17,527,000	Yes	2014-2016	3
146	Viver	ON	Ação	VIVR3	BR	Consumo Cíclico	984,399			
147	Vulcabras	ON	Ação	VULC3	BR	Consumo Cíclico	1,078,668			
148	Weg	ON	Ação	WEGE3	BR	Bens Industriais	13,509,331	Yes	2010-2016	7
149	Wetzel	ON	Ação	MWET3	BR	Bens Industriais	195,649			
150	Whirlpool	ON	Ação	WHRL3	BR	Consumo Cíclico	6,569,138	Yes	2009-2016	8
151	Wilson Sons	ON	Ação	WSON33	BR	Bens Industriais	3,379,128	Yes	2007-2016	10
152	Wlm Ind Com	ON	Ação	WLMM3	BR	Bens Industriais	518,539			