$\label{lem:measuring} \textbf{Measuring value creation for stakeholders - a contribution from the empirical research}$

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Abstract

This paper aims to contribute with the growing discussions among value creation through the lens of stakeholder theory. Starting from an important gap identified in previous studies, according to what improved methods are needed to measure value creation for stakeholders, this research employed a qualitative approach with the main objective of providing a full set of metrics for stakeholders' value creation based on reviewing the literature composed of articles drawn with an empirical quantitative method, and then present a new approach to measure value creation for stakeholders based on filling the gaps identified. Through the results is possible to see how many different ways to measure value creation are being employed by scholars, what can be a result of the challenge already discussed in the literature about what means "value" for each stakeholder group. Despite, it was possible to see that value still much related to the monetary value - financial return for shareholders, remuneration for employees, and product's price for customers. Few metrics are used for intangible values, whose importance as value drivers from a utilitarian point of view had already been highlighted in the literature. The analysis performed and gaps identified opened space to propose a new set of indicators to measure the value created for primary stakeholders, taking their different value drivers in account.

These results shed some light on the academic discussions, showing scholars new variables that can be added in their researches in order to have a better picture of the whole stakeholder value creation system, and has also practical implications for managers, whose challenge is creating as much value as possible for all their company's stakeholders.

Keywords

Value creation. Stakeholder theory. Managing for stakeholders.

1. INTRODUCTION

Value is not a consensual concept. There are authors that advocate on consumer utility based approaches (Priem, 2007) where value creation must be guided by corporations looking forward to provide better allocation of resources aiming to maximize consumer value added. Alternative approaches defend an optimization of value cost relations (VPC - Value-Price-Cost) debating on the differences between use value or exchange value (Bowman and Ambrosini, 2000; Hoopes, Madsen, and Walker, 2003) or even the resource-based view (RBV) approach that looks to understand value through the lens of value, rareness, inimitability, and non-substitutability (Barney, 1991).

At the same time, there is an attempt to comprehend how this value creation relates to stakeholder theory, managing for stakeholders and stakeholder management. As presented by Freeman (2010), we assume that "no stakeholder stands alone in the process of value creation" which leads to the understanding that, as long as the managerial decisions are based on value maximization, multiple stakeholder interests must be taken into account.

Secondly, Freeman (2010) defends that "The primary responsibility of the executive is to create as much value as possible for stakeholders" which leads to another question, how to maximize value and to who is this value being distributed? The usual diagram represents the managing for stakeholders putting the firm in the center surrounded by the so called "primary stakeholders", which includes financiers, customers employees, suppliers and communities, and also by the "secondary stakeholders", including the government, media, competitors, consumer advocate groups and special interest groups (Freeman, 2010).

On Parmar et al (2010) a similar wondering can be identified under the question of "How can firms create different types of value for different stakeholders?". Priem (2013) answers that, through one possible approach, managerial theories started to look to a balanced proposition where value capture would be leveled with a value creation for customers and consumers.

So Tantalo & Priem (2016) point that there is not only the question on value creation but also how to manage this value for many stakeholders, considering that there can be multiple forms for generating value and for more than one or two involved parts.

The essential stakeholders' value drivers, that can be tangible or intangible, are presented by Tantalo and Priem (2016) as a result of the different utility-functions that characterize each stakeholders group. Shareholders, for example, would be driven by the return expected from their investments (tangible), but also by the business risks (intangible). Employees, in turn, would be driven by their salary (tangible), but also by the perceived fairness of the working environment (intangible).

This can be concluded based on the premise that more than one source could create value for each stakeholder and raises the question for managers on how to direct resources creating value for stakeholders without affecting established gains and, in the last instance, ensuring the company's best performance.

In this article we manage to understand how theory is analyzing the factors involved in value generation by the firm and how this value created is relate, influenced and distributed to stakeholders. As previously seen, there are many theories that try to understand value creation and the relationships that border the question. Our purpose is to identify the applied approaches on previous studies to understand value creation and distribution to stakeholder and identify a consensus or most applied methodology to measure value creation for stakeholders.

1.1 Research Problem

"The next step is to see stakeholder theory as a way to redefine how we think about value creation." (Freeman, 2010: 9)

The stakeholder literature is under development in terms of describing value creation for all stakeholders, and at this moment there is no consolidation work on this issue. Assuming that companies' primary stakeholders are composed by shareholders (or financiers), customers, employees, suppliers, communities, managers, and the firms themselves, the point is to contribute in solving the problem identified by Harrison et al (2010, p.71): "...improved methods are needed for measuring value creation".

According to Priem (2014) "relatively little is known about how stakeholder theory can be used by top managers for improving their firms' value-creation strategies" and that is a problem this article attempts to address, contributing to theory through a clarification of the major gaps on the theory in reference of value creation, value measurement and value distribution, on the stakeholder cosmos.

1.2. Objectives

This paper proposes a new method for filing the gap identified on the theory. The main objective is providing a full set of metrics for stakeholders' value creation based on reviewing the literature composed of articles drawn with an empirical quantitative method, and then present a new approach to measure value creation for stakeholders based on filling the gaps identified and new insights that may arise.

A secondary objective is describing how value creation for stakeholders is being measured, what factors are being considered for each kind of stakeholder (limited to primary stakeholders).

It's expect that the analysis contributes to identify the most common metrics adopted in this literature to measure value creation for stakeholders, based on previous empirical research with a quantitative approach, published on the most relevant journals of business field, using this information to identify possible gaps or opportunities to have a better understanding about what counts for each kind of stakeholder.

If business is about how customers, suppliers, employees, financiers, communities, and managers interacting and creating value (Freeman, 2017), by showing how scholars are measuring this value on their empirical research, we expect to contribute to the discussions on managing for stakeholders, also called by Freeman (2017) as "value creation stakeholder theory".

2. THEORETICAL FOUNDATION

2.1 Value Creation and Stakeholder Theory

We initially present the concept on value adopted during the research. Literature shows us that the concept on value is not unanimous, but historical reference may be adopted on Adam Smith's "Wealth of Nations" (1776) where the author points that a central premise is based on individuals' knowledge on what is best for them. Secondly, he affirms that they also have the power of choice, important for decision making on as a value driver.

Given Smith's premises, Harrison and Wicks (2013) discuss value perspective on the utilitarian approach as a broad concept where "anything that has the potential to be worth to Stakeholders" may be understood as value for stakeholders. Simultaneously, it is possible to identify complementary points with Tantalo and Priem (2016) pointing that each stakeholder has

its own value proposition based on different group utilities, which reinforces the idea that value for stakeholders is not a simple concept. Tracing a line on the main stakeholder value theories, we understood that Freeman (2010) could complete this concept once he defends that "no stakeholder stands alone in the process of value creation". So, we understood that each stakeholder has the knowledge of what is best for him and has the power of choice on value acquisition, this value would be anything worth to the stakeholder and each one of the groups would have an individual utility function that may, or may not, be concomitant with other groups in the process of value creation.

Example valu	ie drivers (i.e.	, utility sources)			
Shareholders	Expected return (Fama and French, 1988)	Business risk (Amit and Wernerfelt, 1990)	Investment time horizon (Fama and French, 1988)	Corporate social responsibility (Aguilera <i>et al.</i> , 2007)		
Customers	Perceived value (Fornell <i>et al.</i> , 1996)	Product's price (Ackerman and Tellis, 2001)	Accessibility—time required to purchase the Product (Priem, 2007)	Time required to master using the new product (Priem, 2007)	Perceived quality (Fornell <i>et al.</i> , 1996)	Environmental corporate responsibility and "ecofriendly" products (see Bansal and Roth, 2000; Shrivastava, 1995)
Employees	Salary (Abu- Bader, 2000) and benefits (Sutton, 1985)	Corporate social responsibility (Aguilera et al., 2007)	Perceived fairness of the working environment (Aguilera <i>et al.</i> , 2007; Colquitt, 2001)	Job characteristics and skill variety (Glisson and Durick, 1988)	Work-life balance policies (Haley- Lock, 2008)	
Suppliers	Ordering procedure (Essig and Amann, 2009) and size	Long-term relationships (Kalwani and Narayandas, 1995)	Price received (Kalwani and Narayandas, 1995)	Client payment habits and payment terms (Wong, 2000)	Image (Essig and Amann, 2009) and reputation of the customer	Possibility for cross selling (Essig and Amann, 2009) and potential for follow-up business
Community	Number and types of jobs created (Porter and Kramer, 2011)	Taxes to be paid (Buettner, 2001)	Support infrastructure required (Porter and Kramer, 2011)	Externalities linked to the business (e.g., noise or air pollution) (Bansal and Roth, 2000; Porter and Kramer, 2011)	Local clusters (Porter and Kramer, 2011)	

Shaded area=tangible value driver; No shading=intangible value driver

Figure 1 - Examples of essential stakeholder groups' multiple value drivers. Source: Tantalo and Priem (2016, p.9)

In parallel, it is also necessary to present the major authors that guided our analysis on Stakeholder Theory: Freeman (2010, 2017), Parmar et al (2010), Priem (2013) and Tantalo & Priem (2016). The primary stakeholders are presented on Figure 1. Based on Tantalo and Priem (2016, p.9), there are five classes named: Shareholders, Customers, Employees, Suppliers and Communities. Firms and Managers themselves also appear as relevant stakeholders for value creation metrics in some researches, however, they are not traditionally framed as primary stakeholders, therefore, a more in-depth explanation is given further. The important conclusions on this article will be grounded on the Tantalo and Priem (2016) model.

3. METHOD

This research has a qualitative approach and employ a systematic literature review on previous papers regarding stakeholders and value creation, published between 2000 and 2018, in English language, available on *Web of Science* (core collection) database.

First, a broader search was done using the keywords *stakeholders* AND "value creation" AND Language:English in the title, abstract and/or keywords, resulting on 584 papers. Second, a narrow search was done using the keywords *stakeholders* AND "value creation" AND metric OR measure AND Language:English, adding 3 new papers. The keywords were defined by the authors according to the words or expressions observed in the specific literature.

Then, starting from this total of 587 papers, four filters were applied as defined in Table 1, in order to get the final sample of articles, related to business categories, and applying the subject and research method to meet the research objectives. The final sample is composed of 28 articles.

Filter		Criteria			
1	Document type	Article	356		
2 Category		BUSINESS OR PUBLIC ADMINISTRATION OR MANAGEMENT OR ETHICS OR ENVIRONMENTAL SCIENCES OR GREEN SUSTAINABLE SCIENCE TECHNOLOGY OR ENVIRONMENTAL STUDIES OR ECONOMICS OR ENGINEERING ENVIRONMENTAL OR BUSINESS FINANCE			
3 Subject and research method through abstract		Subject and Reading the abstract: research method Is the paper addressing value creation for any primary stakeholder:			
4	Subject and research method through paper	Reading the paper: Is there any metric for value creation for any primary stakeholder? YES: accept; NO: reject Is it an empirical paper employing a quantitative approach? YES: accept; NO: reject	28		

 Table 1 - Criteria applied to select papers. Source: created by the authors.

Basic descriptive statistic is used to have a clear picture of the final sample of papers analyzed, considering the distribution of papers per year, the most frequent journals and authors, the stakeholder groups mentioned in each one, and the theories or models applied by the researches as basis for their empirical work.

In order to go deep in each paper and figure out what are the most used metrics for value creation for stakeholders, a qualitative meta-analysis was done considering each paper as a unit of analysis (Beurden and Gössling, 2008). Adopting Tantalo and Priem (2016) model as a reference (Figure 1), and analysis was done to figure out what would be the value drivers being considered in previous studies, and what would be the gaps, open the way for a new proposition.

3.1. Data collection conclusion

A total of 28 papers met the criteria defined and represent the final sample of articles analyzed. A sheet was designed to capture the most relevant information to the scope of this research. In addition to the published year, journal, authors and title, other information was extracted in during the assessment of the articles to be used in further analysis: the industry studied in each one, the research method applied by the scholars, the theory or model applied, and the stakeholders analyzed in each paper. The summary of this sheet is presented on Appendix 1.

Some highlights can be discussed about the sample of 28 articles. One point, for instance, is that the subject (value creation for stakeholders) combined with an empirical approach on researches seems to have recent and growing interest on the academy. No articles from the period 2000-2006 remained in the final sample; on the other hand, 70% (21 papers) are from 2015 to 2018.

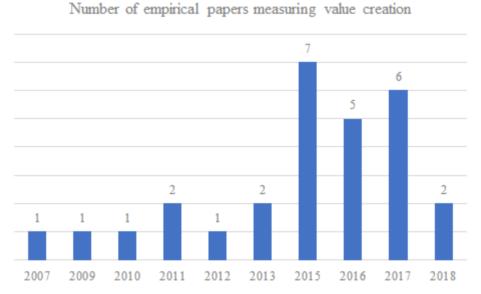


Figure 2 - Number of empirical papers measuring value creation. Source: created by the authors.

Another point is that Strategic Management Journal (SMJ) was one of the most frequent in the sample, with almost 15% (4 papers), maybe reflecting the journal's preference for empirical papers and the relevance of stakeholder and value creation theory for the strategic management field. Other 15% of the papers came from Journal of Business Ethics, another prestigious journal in the managing for stakeholder area.

Number os papers per journal



Figure 3 - Number of papers per journal. Source: created by the authors.

Roberto Garcia-Castro, from IESE Business School, Spain, is the only author with more than one article among the 28, with a total of three empirical papers about value creation for stakeholders (papers 4, 20 and 25 on Appendix 1), one of them as a co-author (paper 4).

Most part of the studies were drawn upon secondary data applying content analysis and/or statistic tools to analyze these data (e.g. bivariate regression, hypothesis testing, OLS and so for). Only three papers are clearly built on primary data (survey, interviews and observations).

Regarding the economic sectors or industries under analysis among the sample of papers, it was noticed that most part of the scholars used data from companies distributed in different industries, usually taking data from companies listed in stock exchange indexes or other available databases (16 papers or 57%). This characteristic indicates that the conclusions drawn here are not specific for a sector or industry but represents trends for the firms in the economy as a whole, or at least to the biggest companies, since SMEs are frequently out of stock exchanges or databases (even though one of the papers is focusing on German's SMEs). The only industry studied exclusively in more than one paper was the mining industry, showing up in three studies (11%).

Overall, the stakeholder group receiving more attention among the papers analyzed here is the *shareholders*, present in 18 papers. This result shows a clear emphasis on shareholders, even in researches related to stakeholder theory, as already observed by Harrison and Wicks (2013). *Employees* are presented in 13 papers, while *customers* are discussed in 9 of them. The group receiving less attention is *suppliers* (three papers).

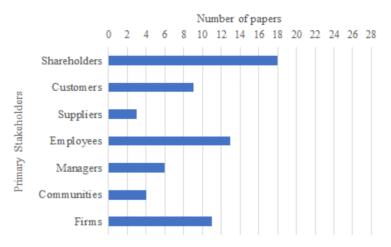


Figure 4 - Frequency of each stakeholder group among the 28 papers. Source: created by the authors.

It is clear that *shareholders* have great importance when analyzing empirical research on value creation for Stakeholders. One reason would be the study that Boaventura et al (2009) brings up to the discussion, the belief that Shareholder interests are frequently put in front of other stakeholders. Although it is not possible to affirm according to Boaventura et al (2009), it is commonly discussed on theory. It is also accepted that firms have the necessity to finance their activities and one important source of financial resources are shareholders. Given that, is common that shareholders are frequently metrified on empirical studies, our research confirms that showing that on eighteen of the 28 collected papers, shareholders are cited and have quantified metrics.

Lastly on the matters of the data collection analysis, it would be important to review the theories behind the chosen metrics. Aware of this, the main theories applied on the chosen papers were identified. On nine of the twenty-eight selected articles, the guiding applied theory was Stakeholder Theory and Corporate Social Responsibility (CSR), corresponding to 32% of the papers. The second most chosen theory was Value Creation and Appropriation (VCA), applied on three of the total twenty-eight, a considerable 10,71%. The other sixteen papers adopted non-repeated theories resulting on 16 theories mentioned only once. The relevance of this information relies on the papers mentioned by all the chosen articles along the data collect. It is possible to identify the guiding authors on each theory and the recurrence of Freeman and Harrison on more than one theory.

4. ANALYSIS OF RESULTS

The full set of metrics for stakeholders' value creation are presented in Table 2. First of all, it's possible to see how many different ways to measure value creation are being employed by scholars, what can be a result of the challenge already discussed in the literature about what means "value" for each stakeholder, and how it can change over the time, the location, the situation and so on. A total of 125 different metrics shown up - 25 different ways to measure value for *shareholders*, 22 for *customers*, 4 for *suppliers*, 33 for *employees*, 10 for *managers*, 25 for *firms*, and 6 for *communities*).

For *shareholders*, five metrics appeared more than once. First, the return on assets (ROA), secondly, the Tobin's Q, third, the return on invested capital (ROIC), fourth the market value added (MVA) and fifth the dividends (the part of the profit distributed for shareholders). For *customers*, only two metrics appeared more than once: products price and customer's satisfaction. The same

for *employees*, with wages and salaries, and pension or retirement benefits, and for *firms*, with cost reduction and increase in profits.

For the groups of *suppliers*, *managers* and *communities*, there was no metric used more than once. For the first group is possible to highlight the price paid for raw materials, contracts and mutual development. For the managers, some monetary compensations showed up, but not restrict to them. And for the former group, only 5 metrics were identified.

Based on the results, of course it's not possible to be affirmative about the real attention received by each stakeholder group in terms of value creation, nor about the value appropriation, but they show that, when talking about value creation in the scholars' perspective on empirical researches, attention has been put on shareholders, employees, firms, customers, managers, suppliers and communities, respectively.

Seeing the outputs with the lens of Tantalo & Priem (2016) – Figure 1 – it's possible to conclude that most part of the metrics are related to tangible values, with few intangible values metrics showing up. That can be influence by the big challenges to measure the intangible but can also be a result of the lack of attention this kind of values receive in managing for stakeholders' practices.

	How Value Creation for Primary Stakeholders has been measured in empirical papers							
	Shareholders (or Investors)	Customers	Suppliers	Employees	Managers	Firms	Communities	
1.	ROA (4)*	26. Product's price (2)	48. Purchased	52. Wages and salaries (3)	85. Monetary	95. Cost reduction (3)	120.Distributions	
2.	Tobin's Q (3)	27. Customer	material's	53. Pension / Retirement	Value	96. Increase in	121.Community	
3.	ROIC (3)	satisfaction (2)	price	benefits (2)	86. CEO	profits (2)	relations	
4.	MVA (2)	28. Fair	49. Contracts	54. Average annual earnings	compensation	97. Operating profit	122.Positive	
5.	Dividends (2)	price/performance	of mutual	per employee	87. Revenues	margin	relationship	
6.	Dividends/valu	ratio	benefit and	55. (wages, salaries and	88. Better work	98. Price-to-earnings	and	
	e added	29. Easy information	respect	social-security costs +	environment	(P/E) ratio	collaborations	
7.	NOPAT	30. Provision of honest	50. Suppliers	employee	89. Stakeholder	99. Sales growth	with outside	
8.	FCF	information	mutual	participation)/value added	dialogue	100.Growth in net sales	stakeholder	
9.	IC	31. Feedback system	developmen	56. Employees Financial	90. Decision-	101.Firms market	123.Indirect	
10.	g_rate	32. Culture based on	t	Conditions	making power	value	economic	
11.	FL	customer needs	51. Long-term	57. Incentives and	through	102. Year-end market	impacts	
12.	AG	33. Product quality	perspective	remuneration	codeterminatio	capitalization	124. Accommodatio	
13.	BV/MV	34. Innovation emphasis	1 1	58. Support and gratification	n and diversity	103.Firm stock return	n for	
14.	EVA	35. Compliance with		59. Benefits	of board	104.Market-to-book	vulnerable	
15.	EBITDA	quality standards		60. Trainings	members	(M/B) ratio	citizens	
16.	ROE	36. Proper dealing with		61. Talent recruitment,	91. Firm's	105.(market value of	125.Suitability for	
17.	Profits and	complaints		development and	knowledge	capital employed-	elderly and	
	pay-outs for the	37. Customer privacy		retention	about	book value of	disabled people	
	shareholders	and security		62. Employment type	stakeholder	capital		
18.	Value-Added	38. Monetary value		63. Employee privacy and	expectations	employed)/book		
	Firm	(compensation)		security	92. Achievements	value of capital		
	Performance	39. Functional value		64. Work safe statistics	in academic	employed		
	Measures and	(task-related)		65. Enhanced safety	environment;	106.Return on Assets		
	Long Term	40. Emotional value		66. Better stakeholder	93. Achievements	(ROA)		
	Shareholder	(intrinsic)		relationships	of research	107.Return on invested		
	Wealth	41. Social value		67. Better work environment	quality;	capital (ROIC)		
19.	Market	(relational)		68. Responsible workplace	94. Achievement	108. Total productivity		
	response	42. Better stakeholder		practices	of community	109.Administrative		
20.	Distributions	relationships		69. Consultation of	services,	quality		
21.	Stakeholder	43. Increased customer		stakeholders for	supporting	110.Technical quality		
	dialogue	base		validation of results	activities and	111.Increase in		
22.	Risk	44. Emotional value		70. Firm's ability to balance	coherence with	personnel		
	management			target conflicts and to	internationaliza			

23. New	45. Call center answer	meet needs of	tion KPIs	112.Employees
technology	rate	stakeholders efficiently	effectiveness	productivity
investment	46. Call center first call	71. Talent and leadership		113.Product
24. Economic	resolution rate	72. Involvement of		characteristics
performance	(FCR)	management		114.Planning
and	47. Stakeholder	73. Transformation of		115.Positioning in the
sustainability	dialogue	stakeholder demands into		market
25. Governance		company activities		116.Market presence
structure		74. Work-life-balance for		117.Better stakeholder
		employees		relationships
		75. Employee relations		118.Stakeholder
		76. Diversity		dialogue
		77. Employee oriented design		119.Local development
		of work		
		78. Participation in decision		
		making		
		79. Young Researchers		
		Internationality		
		80. Professors Internationality		
		81. Administrative Staff/		
		Non-Academic Staff		
		Conditions		
		82. Lecturers Internationality		
		83. Service and		
		Administration Resources		
		Environment		
		84. Stakeholder dialogue		

^{*}Number of occurrences in parentheses, when higher than one.

Table 2 - Metrics used for Value Creation for Primary Stakeholders in empirical papers. Source: created by the authors.

4.1 On managers and firms

On Tantalo & Priem (2014) the five primary stakeholder groups are identified to have different importance and wishes. The groups are not homogeneous, some are detractors, some are forever with the firm. The authors identified that a contribution could be made pointing each of the five wants on the specific groups of stakeholders.

Here we make an observation on managers and firms just to understand why they show up in researches beyond the traditional five primary stakeholders. We understand that managers are not stakeholders once their role is to distribute among the stakeholders resulting in a non-zero sum game. Managers have a singular position, they interact with all the stakeholders, it's up to them to develop strategies for all stakeholders. Herbert Simon (1997) attests that there was no single organization goals, if customers don't participate the firm is not successful, suppliers the same, financiers, and so on. He says that each one of these entities (nowadays stakeholders) presents constraints to the firm survival and it cannot be said that there will be no paying for each of these stakeholders. Even when we say "our primary goal is shareholder value maximization" it is only possible within the boundaries of the other four primary stakeholders, therefore, it would not be possible to put managers in a similar position of the primary stakeholders but as a major player on this structure.

An organized decision-making system is guided by the managers and limited by the boundaries of the five primary stakeholder groups. If one wants to prioritize any group, one will have to take something away from the others (Tantalo & Priem, 2016; Freeman, 2010). Taken this into account, we understand that there were articles mentioning metrics for managers, but we assume that, although they are relevant for value creation analysis, they should not be considered as parallels for stakeholder management given that managers are the players that affect the value propositions to each stakeholder groups.

The same may be applied for firm analysis. Firms as a hole have general interests that go beside stakeholders wants and needs (Freeman, 2010), having that on sight, we understand that articles identify firm metrics that are important for value creation analysis, but the firm must not be assumed as a stakeholder itself.

4.2 Discussions

Based on the value creation metrics observed in empirical papers (Table 2) and the references on value drivers provided by Tantalo and Priem (2016), presented on Figure 1, a new set of value creation metrics is proposed below, in Table 3.

By analyzing similarities among the 125 different metrics presented on Table 2, some categories were defined and grouped as a single metric. For example, the variety of metrics used do measure financial return to investors, such as ROA, ROIC, Tobin's Q, MVA and Dividends, was grouped as "financial return on investments". The salary, wages, earnings and so for was grouped as "remuneration" for employees. And so on for all the metrics identified in the literature. This procedure made the similarities and gaps much more evident.

It's clear that some consensus exists only when talking about *shareholders*, *customers* and *employees*. These are the only stakeholder groups where the same type of metric was adopted more than once. And all of them were somehow considered as value drivers by Tantalo and Priem (2016). Through this chart is possible to see that value still much related to the monetary value (financial return, remuneration, price), but also that other nonmonetary and even intangible values are eventually considered on empirical researches (second column).

	Value creation metrics – from the empirical research to new propositions						
Stakeholders	Most used metrics	Metrics used once	Propositions**				
Shareholders	 Financial return on investments (such as ROA, ROIC, Tobin's Q, MVA or Dividends) 	 Risk management New technology investment* Sustainability (CSR) policies adoption Governance structure 					
Customers	Product's priceCustomer satisfaction	 Product quality Compliance with standards Information available, dialogue Innovation Functional, social and emotional value 	 Time required to purchase the product and to master using it Presence of environmental corporate responsibility and "ecofriendly" products 				
Employees	RemunerationRetirement plans	 Training and people development Occupational health and safety Better work environment / relations Diversity Work-life-balance Participation in decision making 	 CSR policies adoption Job characteristics and skill variety 				
Suppliers		 Purchased material's price Contracts of mutual benefit and respect Long-term perspective Suppliers mutual development 	 Proper ordering procedure Evidences of good image and reputation of the customer Possibility for cross selling and potential for follow-up business 				
Community		 Community relations and collaborations Indirect economic impacts 	 Number and types of jobs created Taxes to be paid Support infrastructure required Externalities linked to the business (e.g., noise or air pollution) Local clusters 				

^{*} Underlined metrics on this column were not pointed as value driver by Tantalo and Priem (2016).

Table 3 - Value creation metrics – from the empirical research to new propositions. Source: created by the authors.

When we turn the attention to the metrics showing only once inside the empirical papers, we figured out some metrics that brings new kind of value drivers, such as new technology investments and governance structure for Shareholders, compliance with standards for Customers, training and people development for Employees, mutual development for Suppliers or relations/collaborations for Communities among others. These cases are underlined on the third column of Table 3. This result expands the vision of value drivers presented by Tantalo and Priem (2016), having implications for both scholars and managers.

The propositions presented on fourth column that complete Table 3 are then based on filing the gaps left by empirical researchers in comparison to the value drivers proposed by

^{**} Propositions are based on value drivers pointed by Tantalo and Priem (2016) that were not used in empirical researches.

Tantalo and Priem (2016), which are being considered here as a basis for utility sources identification. No metrics for these value drivers was found in empirical papers, exposing some gaps and opportunities to better capture the value created when managing for stakeholders.

Thus, the analysis performed opened space to consider the set of metrics presented on the three columns of Table 2 as a big picture of a stakeholder value creation system, which encompass a concise but comprehensive range of indicators for tangible and intangible values that can represent what really matters for the ones that can be the key for the companies' success: their primary stakeholders.

5. CONCLUSIONS

This article was designed on "value creation stakeholder theory", as defined by Freeman (2017) and the value creation concept proposed by Harrison and Wicks (2013). In this context, Harrison et al (2010, p.71) concluded that "...improved methods are needed for measuring value creation". Trying to contribute on filling this gap, this paper proposed a new approach providing a full set of metrics for stakeholders' value creation based on reviewing the literature composed of articles drawn with an empirical quantitative method, resulting in a new proposition.

The stakeholder literature still under development in terms of describing value creation for all stakeholders, and this research aimed to contribute as a kind of consolidation work on this issue. The results shed some light on discussions about value creation stakeholder theory and bring opportunities for future researches, for example, expanding the analysis to empirical but non-quantitative papers, such as case studies, or even expanding the analysis for non-empirical papers. The limited sample of articles analyzed is a limitation of this research. Other opportunity would be expanding this analysis to secondary stakeholders. Future studies can also use the set of metrics proposed on Table 3 to study the case of a company and contribute identifying new metrics that can be added.

It was possible to identify the most common metrics adopted and some gaps, as presented in Table 3. This new set of metrics on value creation for primary stakeholders can contribute in understanding what counts for each stakeholder group, being useful for managers, whose challenge is creating value for all their company's stakeholders, and for scholars, that can add new variables in their researches in order to have a better picture of the whole value creation system.

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Appendix 1. Data collected – final sample of articles selected for in-deep analysis

		•			Primary Stakeholders analyzed						
#	Year	Journal	Authors		Customers	Suppliers	Employees	Managers	Communities	Firms	
1	2018	STRATEGIC MANAGEMENT JOURNAL	Ramirez, C; Tarzijan, J				X				
2	2018	ASIA PACIFIC BUSINESS REVIEW	Marc, M; Sprcic, DM; Zagar, MM	X							
3	2017	STRATEGIC MANAGEMENT JOURNAL	Dorobantu, S; Odziemkowska, K	X							
4	2017	STRATEGIC MANAGEMENT JOURNAL	Lieberman, MB; Garcia-Castro, R; Balasubramanian, N	X	X	X	X	†			
5	2017	STRATEGIC MANAGEMENT JOURNAL	Deb, P; David, P; O'Brien, J	X							
6	2017	CORPORATE GOVERNANCE-THE INTERNATIONAL JOURNAL OF BUSINESS IN SOCIETY	Kiesewetter, D; Manthey, J	X							
7	2017	JOURNAL OF BUSINESS & INDUSTRIAL MARKETING	Hsieh, YH; Chen, WT		X						
8	2017	BUSINESS ETHICS-A EUROPEAN REVIEW	Gomez-Bezares, F; Przychodzen, W; Przychodzen, J	X							
9	2016	KNOWLEDGE AND PROCESS MANAGEMENT	Hejazi, R; Ghanbari, M; Alipour, M	X							
10	2016	SUSTAINABILITY	Dilling, PFA	X	X	X	X	X	X		
11	2016	JOURNAL OF INTELLECTUAL CAPITAL	Iazzolino, G; Laise, D	X			X				
12	2016	MANAGEMENT DECISION	Lee, S; Jung, H	X	X	X	X				
13	2016	E & M EKONOMIE A MANAGEMENT	Stankeviciene, J; Vaiciukeviciute, A				X	X			
14	2015	JOURNAL OF MANAGEMENT STUDIES	Hall, M; Millo, Y; Barman, E					X			
15	2015	JOURNAL OF PURCHASING AND SUPPLY MANAGEMENT	Schenkel, M; Krikke, H; Caniels, MCJ; van der Laan, E		X					X	
16	2015	AMFITEATRU ECONOMIC	Dumitru, M; Guse, RG; Feleaga, L; Mangiuc, DM; Feldioreanu, AI	X			X	X	X		
17	2015	JOURNAL OF BUSINESS ETHICS	Queen, PE	X						X	
18	2015	JOURNAL OF SERVICES MARKETING	Grace, D; Lo Iacono, J		X						
19	2015	RBGN-REVISTA BRASILEIRA DE GESTAO DE NEGOCIOS	Vidal, NG; Berman, S; Van Buren, H	X	X		X	X		X	
20	2015	PROPERTY MANAGEMENT	Heitel, S; Kampf-Dern, A; Pfnur, A	X			X	X	X		
21	2013	EUROPEAN JOURNAL OF MARKETING	Zainuddin, N; Russell-Bennett, R; Previte, J		X					X	
22	2013	JOURNAL OF BUSINESS ETHICS	Poulain-Rehm, T; Lepers, X	X			X			X	
23	2012	CORPORATE SOCIAL RESPONSIBILITY AND ENVIRONMENTAL MANAGEMENT	Patari, S; Jantunen, A; Kylaheiko, K; Sandstrom, J							X	
24	2011	BUSINESS & SOCIETY	Garcia-Castro, R; Arino, MA; Canela, MA	X							
25	2011	JOURNAL OF BUSINESS ETHICS	Faleye, O; Trahan, EA	X			X	X		X	
26	2010	JOURNAL OF BANKING & FINANCE	Jiao, YW	X		<u> </u>	X		X	X	
27	2009	BUSINESS ETHICS-A EUROPEAN REVIEW	Hammann, EM; Habisch, A; Pechlaner, H		X	<u> </u>	X			X	
28	2007	JOURNAL OF BUSINESS ETHICS	Husted, BW; Allen, DB							X	

Source: created by the authors.