

RN

# Revista de Negócios

Studies on emerging countries

# Contents

## Volume 26, Number 1, January, 2021

### Articles

Effect of Financial Restriction on Sticky Costs: Empirical Evidence from Brasil.....6  
*Larissa Degenhart, Micheli Aparecida Lunardi, Vinícius Costa da Silva Zonatto, Cristian Baú Dal Magro*

International Ambidexterity: a competitive advantage of fashion industry firms in emerging markets.....22  
*Monica Facchini Krinke, Dinora Eliete Floriani, Giovana Bueno, Ivan Lapuente Garrido*

Corporate governance in state-owned companies: effects on performance.....49  
*Thiago Nery da Cunha, Rosilene Marcon, Jaison Caetano da Silva, Cinara Gambirage*

COVID-19 e a Coprodução das Entidades Sociais e Governamentais de Controle .....63  
*Gislaine Borges, Luis Moretto Neto*

## **PRESENTATION**

Revista de Negócios is located in Blumenau, state of Santa Catarina, Brazil, in the campus of Universidade Regional de Blumenau—FURB, post-graduate programme in Business Administration. Revista de Negócios is published quarterly in January, April, July and October on the website [furb.br/rn](http://furb.br/rn).

**POSTMASTER:** Universidade Regional de Blumenau-FURB, Rua Antônio da Veiga, 140 - Victor Konder, Blumenau - SC, 89012-900. Department: PPGAD/FURB - D102.

## **MISSION**

Revista de Negócios advances the knowledge and practice of management learning and education. It does it by publishing theoretical models and reviews, mainly quantitative research, critique, exchanges and retrospectives on any substantive topic that is conceived with studies on emerging countries. Revista de Negócios is an interdisciplinary journal that broadly defines its constituents to include different methodological perspectives and innovative approach on how to understand the role of organizations from emerging countries in a globalized market.

## **SCOPE AND FOCUS**

Revista de Negócios aims to create an intellectual and academic platform, under the perspective of Strategic Management Organization, to promote studies on Emerging Countries. The Journal looks and reviews for contributions to the debate about researches on two specific topics: innovation and competitiveness and strategic organization in emerging countries. The topic of innovation and

competitiveness covers all studies and researches related to how organizations can sustain their competitiveness, particularly focusing on innovations, entrepreneurship and performance. The second topic covers studies and researches on strategic management of organizations, more specifically on how companies can or should act at strategic level looking mainly but not only to external context, supply chain, competitive strategies in international market, and marketing approach. The editorial policy is based on promoting articles with critical perspectives seeking for the understanding of the differences and similarities among emerging countries and in comparison with experiences and theories on strategic management in developed countries. It intends to promote specific contributions of how theoretical and empirical studies on emerging economies may contribute to the advance of theories related to innovations and competitiveness and strategic management of organizations. It is welcome scholars particularly working on such topics to submit theoretical essays, empirical studies, and case studies. The Revista de Negócios is open to different methodological perspectives and innovative approaches on how to understand the role of organizations from emerging countries.

## **TARGET AUDIENCE**

The target audience of Revista de Negócios is the Brazilian international academic community in related fields of knowledge on business management.

## **EDITORIAL STRUCTURE**

### **The Editor**

Luciano Carvalho, Prof. Dr.  
Postgraduate Program of Business  
Administration  
Regional University of Blumenau -  
FURB  
[lccarvalho@furb.br](mailto:lccarvalho@furb.br)

### **Section Editor**

Cinara Gambirage, Dra  
Brazilian School of public and Business  
Administration  
Fundação Getulio Vargas – FGV Ebape  
[cinara.gambirage@fgv.edu.br](mailto:cinara.gambirage@fgv.edu.br)

## **EDITORIAL COMPOSAL BOARD**

### **Executive Board**

Coeditor  
Mohamed Amal, Prof. Dr.  
Postgraduate Program of Business  
Administration  
Regional University of Blumenau -  
FURB  
[amal@furb.br](mailto:amal@furb.br)

Coeditor  
Marianne Hoeltgebaum, Prof. Dr.  
Postgraduate Program of Business  
Administration  
Regional University of Blumenau -  
FURB  
[marianne@furb.br](mailto:marianne@furb.br)

Communication Editor  
Cinara Gambirage, Dra  
Brazilian School of public and Business  
Administration  
Fundação Getulio Vargas – FGV Ebape  
[rn@furb.br](mailto:rn@furb.br)

English Language Editor  
Prof. Marta Helena Caetano, MA.  
FURB Language Center  
Regional University of Blumenau -  
FURB  
[mhelena@furb.br](mailto:mhelena@furb.br)

System Suport

Marcos Rogério Cardoso,  
University Library Prof. Martin  
Cardoso da Veiga  
Regional University of Blumenau -  
FURB  
[mcardoso@furb.br](mailto:mcardoso@furb.br)

### **Academic Board**

Luciana Lazzeretti, Prof. Dr.  
Department of Management  
University of Firenze  
[luciana.lazzeretti@unifi.it](mailto:luciana.lazzeretti@unifi.it)

Mohamed Amal, Dr.  
Postgraduate Program of Business  
Administration  
Regional University of Blumenau -  
FURB  
[amal@furb.br](mailto:amal@furb.br)

Shaker A. Zahra, Prof, Dr.  
Strategic Management and  
entrepreneurship department  
Carlson School of management -  
University of  
Minnessotazahra004@umn.edu

Tales Andreassi, Dr.  
Postgraduate Program of Business  
Administration  
Getúlio Vargas Institution SP – FGV  
[tales.andreassi@fgv.br](mailto:tales.andreassi@fgv.br)

### **Institutional Board**

The Institutional Board is consisted by  
the academic community of Regional  
University of Blumenau - FURB.

Marcia Cristina Sardá Espindola, Prof,  
Dra.  
Rector of Regional University of  
Blumenau - FURB  
[reitoria@furb.br](mailto:reitoria@furb.br)

João Luiz Gurgel Calvet da Silveira  
Vice - Rector of Regional University of  
Blumenau - FURB  
[reitoria@furb.br](mailto:reitoria@furb.br)

Oklinger Mantovaneli Junior, Prof. Dr.  
Dean of Postgraduate Studies, Research  
and Culture - PROPEX  
Regional University of Blumenau -  
FURB  
[propex@furb.br](mailto:propex@furb.br)

Valter Augusto Krauss, Prof.  
Director of Applied Social Sciences  
Regional University of Blumenau -  
FURB  
[ccsa@furb.br](mailto:ccsa@furb.br)

Giancarlo Gomes, Prof., Dr.  
Coordinator of the Postgraduate  
Program of Business Administration  
Regional University of Blumenau -  
FURB  
[giancarlog@furb.br](mailto:giancarlog@furb.br)

Ciel Antunes de Oliveira Filho, Prof.  
Dr.  
Head of Business Administration  
Department  
Regional University of Blumenau –  
FURB  
[holiveira@furb.br](mailto:holiveira@furb.br)

Darlan Jevaer Schmitt, Ms.  
Director of University Library Prof.  
Martin Cardoso da Veiga  
Regional University of Blumenau -  
FURB  
[furbbc@furb.br](mailto:furbbc@furb.br)

Gelci Rostirolla, Ms.  
Periodicals Support  
Regional University of Blumenau -

FURB  
[gel@furb.br](mailto:gel@furb.br)

David Colin Morton Bilsland, Prof.  
Head of International Relations Office -  
FURB  
Regional University of Blumenau -  
FURB  
[cri@furb.br](mailto:cri@furb.br)

Márcia Regina Bronnemann, Prof.  
Head of Marketing and Communication  
- FURB  
Regional University of Blumenau -  
FURB  
[ccm@furb.br](mailto:ccm@furb.br)

### **Past Editors**

**2014 - 2016** Marianne Hoeltgebaum

**2014 - 2015** Edson Roberto Scharf and  
Marianne Hoeltgebaum

**2012 - 2013** Edson Roberto Scharf

**2010 - 2011** Leomar dos Santos

**2008 - 2009** Denise del Prá Netto

**2006 - 2007** Mohamed Amal

**2004 - 2005** Gérson Tontini

**2002 - 2003** Emerson Maccari. Valeria  
Riscarolli, Luciano Rosa  
and Paloma Zimmer

**2000 - 2001** Emerson Maccari

**1998 - 1999** Gérson Tontini, Denise Del  
Prá Netto and Valeria  
Riscarolli

**1996 - 1997** Denise Del Prá Netto

## Effect of Financial Restriction on Sticky Costs: Empirical Evidence from Brazil

Larissa Degenhart<sup>1</sup>, Micheli Aparecida Lunardi<sup>2</sup>, Vinícius Costa da Silva Zonatto<sup>3</sup>, Cristian Baú Dal Magro<sup>4</sup>

<sup>1</sup> Universidade Federal de Santa Maria (UFSM) - [lari\\_ipo@hotmail.com](mailto:lari_ipo@hotmail.com)

<sup>2</sup> Universidade Regional de Blumenau (FURB) - [michelilunardi01@gmail.com](mailto:michelilunardi01@gmail.com)

<sup>3</sup> Universidade Federal de Santa Maria (UFSM) - [viniciuszonatto@gmail.com](mailto:viniciuszonatto@gmail.com)

<sup>4</sup> Universidade Comunitária da Região de Chapecó (Unochapecó) - [crisbau@unochapeco.edu.br](mailto:crisbau@unochapeco.edu.br)

### KEYWORDS

Financial Restriction,  
Behavior of costs,  
Brazilian companies.

Received 13.05.2020

Accepted 12.04.2021

ISSN 1980-4431

Double blind review



### ABSTRACT

This research aimed to investigate the impact of financial constraint on asymmetric cost behavior in companies listed on B3 (Brazil). For that, a descriptive, documentary and quantitative study were developed with the use of multiple linear regression, totaling a sample of 834 observations. The results show that companies with and without financial restrictions present an asymmetrical behavior of costs, ie, the increase in total costs in the face of an increase in sales revenue is higher when compared to the reduction of costs due to a proportional reduction in the recipe. However, the findings have shown that financially constrained firms better adjust total costs to the company's situation and decreases in revenue. In other words, it can be seen that these companies make more drastic cuts in total expenses due to the reduction of sales revenue, however, increasing the asymmetry of costs. On the other hand, when the economy returns, it loses due to the low investment capacity for growth, because they are experiencing difficulties in obtaining resources. It is concluded that the behavior of costs is adapted to the conditions of companies that are financially constrained. The evidence found in the study contributes to creditors and regulators, who can support new financing policies and risk monitoring for companies with financial constraints, since they aim to adopt the asymmetry in costs due to a fall in revenue, which reveals that they seek exit from the financial situation, with a view to improving the company's overall capacity.

### PALAVRAS-CHAVE

Restrição Financeira,  
Comportamento dos  
custos,  
Empresas brasileiras.

### RESUMO

Esta pesquisa objetivou investigar o impacto da restrição financeira no comportamento assimétrico dos custos de empresas listadas na B3 (Brasil). Para tanto, foi desenvolvido um estudo descritivo, documental e quantitativo com a utilização de regressão linear múltipla, totalizando uma amostra de 834 observações. Os resultados mostram que as empresas com e sem restrições financeiras apresentam um comportamento assimétrico dos custos, ou seja, o aumento dos custos totais diante de um aumento da receita de vendas é superior quando comparado com a redução dos custos devido a uma redução proporcional na receita. No entanto, os resultados revelaram que as empresas com restrições financeiras adaptam melhor os custos totais diante da situação da empresa e diminuições na receita. Em outras palavras, pode-se constatar que essas empresas realizam cortes mais drásticos nos gastos totais em decorrência da redução da receita de vendas, todavia, aumentando a assimetria dos custos. Por outro lado, quando da retomada da economia acabam perdendo pela baixa capacidade de investimento para crescimento, por estarem passando por dificuldades para a obtenção de recursos. Conclui-se que o comportamento dos custos é adaptado às condições das empresas com restrições financeiras. As evidências encontradas no estudo contribuem para credores e reguladores, que podem subsidiar novas políticas de financiamento e monitoramento de risco para empresas com restrição financeira, uma vez que visam adaptar a assimetria ocorrida nos custos em função de uma queda na receita, o que revela que procuram saídas diante da situação financeira, com vistas a melhorar a capacidade global da empresa.

## 1 Introduction

The behavior of costs refers to the way costs respond to the change in activity and decision (Ibrahim & Ezat, 2017). Understanding cost behavior is critical for managers and accountants in order to provide and use information to make effective decisions (Maher et al., 2008). Especially when companies are in periods of financial constraint, when companies have difficulty obtaining financial resources from external sources and the cost of raising funds increases (Paulson & Townsend, 2004; Kaplan & Zingales, 1997). The companies face financial constraints due to imperfect capital market (Ro et al., 2017).

When there is asymmetry in costs, these increase more with increases in activities, than the decrease in response to an equivalent decrease in activities. Thus, in this behavior, costs increase more when sales revenues increase than they fall when sticky costs (Anderson et al., 2003). Asymmetric cost behavior contradicts the traditional model, which assumes that costs behave symmetrically for increases and decreases in activity (Noreen & Soderstrom, 1997), ie, there is symmetry in cost behavior (anti-sticky). The theory of sticky costs highlights that cost rigidity is a consequence of deliberate resource utilization decisions by managers (Chen et al., 2013).

In this sense, it is pointed out that companies with greater financial constraints will seek better alignment of cost behavior, therefore, financial constraints may have an impact on the cost behavior of companies. Evidence from the Campello et al. (2010) study indicated that financially constrained firms plan deeper spending cuts and seek credit lines from banks because of fears of future credit restraint and sell more assets to finance its operations. Thus, analysts should be able to measure the degree of financial constraints faced by firms by analyzing the flow of investments (Almeida & Campello, 2001).

The literature on the subject has grown and studies have been developed relating financial constraints with qualitative and quantitative measures of accounting reports (Kaplan & Zingales, 1997), investment in research and development (Bond et al., 2003), entrepreneurship (Paulson & Townsend, 2004), policies of cash reserves (Costa et al., 2008), survival and growth of enterprises (Musso & Schiavo, 2008), financial crisis (Campello et al., 2010), mergers and

acquisitions (Chen et al., 2009), investment (Crisóstomo et al., 2014), the sensitivity of the investment cash flow (Riaz et al., 2016), volatility of cash flow (Palkar, 2017), financing costs and inventories (Hoberg et al., 2017).

Despite the development of these studies, however, "reflexes of financial constraints on accounting numbers is still a scarce issue in the literature that seeks interactions between accounting and finance" (Demonier et al., 2015, p. 1265). Therefore, there is a gap for the realization of this research, because no evidence was found of studies that aimed to investigate the relationship between financial constraints and cost behavior. Thus, in order to understand this relationship, it is necessary to understand the behavior of costs in these environments.

The starting point in the fixed cost structure is that many, but not all, arise a result of deliberate resource commitment decisions made by managers (Cohen et al., 2017). Given the context of the financial constraint, there is a need for companies to understand the impact of this on cost behavior, as well as the necessary adaptation to costs when companies are subject to financial constraints, since studies on this subject need to be given more attention, especially in the case of the Brazilian economy, which is in the process of expansion in the world scenario (Richartz & Borgert, 2014) and mainly because the Brazilian environment, being a developing country, presents an imperfect capital market making companies depend, almost exclusively, on banks to raise funds (Paulson & Townsend, 2004; Ro et al., 2017).

There is evidence in the literature that suggests that costs do not always react in a linear fashion, as advocated by the traditional model, Anderson et al. (2003), who called cost behavior asymmetric. However, the empirical results showed the existence of asymmetry of the costs (Silva et al., 2019; Pamplona et al., 2016; Ibrahim, 2015; Banker et al., 2014; Balakrishnan et al., 2014; Marques et al., 2014; Richartz & Borgert, 2014; Caylor & Lopez, 2013; Porporato & Werbin, 2012; He et al., 2010; Calleja et al., 2006; Medeiros et al., 2005; Subramaniam & Weidenmier, 2003; Anderson et al., 2003; 2007). In addition, there is evidence in the literature that points to internal factors that may exert an influence on cost behavior, such as companies that are financially constrained. The results of the study by Crisóstomo et al. (2014) show that Brazilian companies facing

financial constraints depend on internally generated funds. Thus, companies that are going through financial difficulties can adapt the behavior of the costs in front of their financial situation.

Considering that the relationship proposed in this study is incipient, this fact motivates the investigation of the effects of financial constraints on companies' practices regarding costs in relation to increases and decreases in revenue. Thus, the present study seeks to answer the following research question: Do companies listed in B3 with financial constraints adjust the behavior of costs? The objective is to investigate whether companies listed in B3 with financial constraints adjust the behavior of costs.

It is justified the analysis of the Brazilian environment, since according to Aldrighi and Bisinha (2010), it gains importance to the discussion about the financial restrictions that Brazilian companies face, due to their own characteristics as the institutional environment in which they operate and with fragile legal protection to the investors. In addition, the role of financial constraints in the choice of investments made by companies is an important topic of financial research, since financially constrained companies do not opt for the optimal level of investment since they will have to invest in lower levels (Costa et al., 2008). For Farre-Mensa et al. (2016) financial constraints are fundamental for empirical research in the areas of finance and economics.

In addition, the literature on financial constraints focuses mainly on developed countries, while developing countries, with increasing importance in the international economy, have received little attention, such as Brazil. Although the existence of research that has analyzed the financial constraints, the research is limited on this topic in the developing markets, is an important motivation for the development of this study with a focus in Brazil (Crisóstomo et al., 2014). According to Riaz et al. (2016) in developed financial markets, firms are less likely to suffer severe financial constraints, as developing markets suffer more from this financial problem. Therefore, it has been interesting to analyze data from Brazil, since we believe that the evidence will contribute to the literature, drawing attention to the aspects of the behavior of costs in the face of financial constraints faced by Brazilian companies.

The relationship between financial constraint

and sticky costs is justified by managers need to know how costs behave in order to make informed decisions about products and to plan and evaluate performance (Venieris et al., 2015; Lanen et al., 2011) especially when they meet and financial constraint and is required of managers better organizational decision-making (Cohen et al., 2017). With regard to investors, they depend on published financial statements based on available information on the determinants of cost behavior. From the point of view of financial analysts, predicting cost behavior is an essential part of earnings forecasting (Xu & Sim, 2017; Weiss, 2010).

This research, when investigating the impact of financial constraint on asymmetric cost behavior in companies listed on B3 (Brazil), contributes to the expansion of the literature on this subject and also helps the investors, creditors, and regulators understand the trends that have financial restrictions adopted in view of the occurrence of asymmetry in costs.

The study provides empirical evidence on the relationship between sticky costs, for companies with financial constraints. Understanding fixed cost behavior has direct benefits for managers to make decisions about cost control and external stakeholders (for example, financial analysts) who evaluate the company's performance (Xu & Sim, 2017). The findings enrich the existing knowledge of the real effects of financial constraints and introduce insights into the relationship between financial constraints and corporate behavior.

## **2 Review of Literature and Research Hypotheses**

### **2.1 Behavior of Costs**

One of the first studies that defined and examined cost rigidity was that of Anderson et al. (2003). Anderson et al. (2003) demonstrated that costs increase more when activity increases than fall as activity declines. In the economic theory of cost stickiness, costs are sticky because of economic forces that act to slow the downward adjustment more than the upward adjustment. The forces include permanent sales decline, macroeconomic growth, and asset and employee intensities (Anderson et al., 2003).

The results showed that the firms' costs presented an asymmetric behavior, called sticky



costs. This theory has been proven in the studies developed by Pamplona et al. (2016), Ibrahim (2015), Balakrishnan et al. (2014), Banker et al. (2014), Marques et al. (2014), Richartz and Borgert (2014), Caylor and Lopez (2013), Porporato and Werbin (2012), He et al. (2010), Calleja et al. (2006). In the Brazilian scenario, Medeiros et al. (2005), tested four hypotheses related to asymmetry in cost behavior, which was partially accepted, however, also showed asymmetry in cost behavior.

Calleja et al. (2006) point out that companies that have a property structure comprising fixed assets could expect a high level of cost asymmetry. The results suggest that the asymmetric behavior of costs occurs when the revenue presents small decreases. In addition, costs tend to be less asymmetric when cost analysis is carried out over long periods of time, and even when firms have higher revenue variances, ie, higher than 10%, because changes in this level require changes in the costs. Banker et al. (2008) provide evidence that cost variations tend to be asymmetric, due to managers' decisions tied to their optimism. Weiss (2010) identified that asymmetric behavior of costs influences the priorities of analysts and investors because they use this information to observe the value of the company.

The results of the research developed by Chen et al. (2012) suggest that, in addition to economic factors, the agency (corporate governance) factors also motivate managers' decisions to adjust costs and, thus, help explain the cost behavior. The findings of Caylor and Lopez (2013) revealed that the normal behavior of costs occurs from a decrease of sales and expenses since the expenses did not diminish as much as the decrease in the sales.

For Richartz and Borgert (2014), when performed a general analysis with all companies, the theory of sticky costs was partially applicable, seen that for levels of variation of revenues of up to 10% there was an asymmetry in costs. The evidence found by Balakrishnan et al. (2014) allowed us to conclude that the data observed in the short term tend to present asymmetry in costs. On the other hand, when observed the behavior of costs over longer periods, the asymmetry presented a reduction.

Medeiros and Costa (2004) present evidence on cost rigidity by analyzing a sample of 198 Brazilian companies in the period 1986-2003. Its

results demonstrate that the behavior of costs increases 0.59% for a 1% increase in sales and decreases 0.32% for a 1% reduction in sales. He et al. (2010) examine the cost behavior for a sample of 1,802 Japanese companies in the period 1975-2000 and find evidence of cost rigidity in Japan. Their results indicate that the cost behavior is persistent and increases by 0.59%, but decreases by 0.45% for a corresponding 1% change in sales.

Marques et al. (2014) suggest that the behavior of costs is asymmetrical in relation to the increase in sales revenue. However, asymmetry declined when considered for more than one year. The research by Banker et al. (2014), indicates that managers are more likely to increase production capacity when, in the two previous periods (or more), increases in demand occur, that is, the occurrence of asymmetry in costs. Thus, they are also more likely to decrease resource allocation if, in two periods (or more), revenue decreases, and thus there is the asymmetric behavior of costs (Banker et al., 2014). In this sense, when the cost behavior analysis is performed year-on-year, cost variations tend to be asymmetric.

The research carried out by Pamplona et al. (2016) revealed that the behavior of costs in the largest publicly traded companies in Brazil, Chile and Mexico are asymmetric, since the increase in costs through the increase in sales revenue is higher when compared to the reduction in costs due to of a proportional reduction in revenue. From these results, the total costs of Brazilian companies are less rigid since they presented asymmetric behavior. Finally, Subramaniam and Weidenmier (2003) point out that the behavior of costs can differentiate between companies since each presents different characteristics and characteristics.

To do so, in the face of the evidence found in the literature of an asymmetric behavior of costs, the first hypothesis of the research was elaborated:

***H<sub>1</sub>: The behavior of costs of Brazilian companies is asymmetric and the increase in costs through the increase in net sales revenue is higher when compared to the reduction of costs due to a proportional reduction in net sales revenue.***

## 2.2 Financial Restriction and Costing Behavior

The financial constraints present a macroeconomic dimension since the fluctuations in

the companies' cash flow and liquidity are correlated with the movements of the economy throughout the business cycle (Oliveira, 2019). A company is financially constrained if the cost or availability of external funds prevents it from making an investment it would have chosen to make when internal resources were available (Kaplan & Zingales, 1997), and also when it does not have sufficient resources to make investments (Korajczyk & Levy, 2003). For Paulson and Townsend (2004) the financial constraint will make supply and demand for credit related to the characteristics of the borrower, the lender and the financial market. In the absence of financial constraints, entrepreneurs would be able to compensate for the shortfall between their own funds and the maximum level of investment profitability through loans (Aldrich & Bisnis, 2010).

Danielson and Scott (2004) provide evidence that companies facing financial constraints are dependent on the use of credit to finance their operations. Thus, financial constraints have a significant impact on business activity (Paulson & Townsend, 2004). If a company faces financial constraints, its access to credit markets is more limited and its funds are more expensive. To the extent that increased debt reduces shareholder returns, the capital of financially constrained firms should be less valued (Kieschnick et al., 2013). In this way, a company needs to manage its internal costs when it is in financial restriction.

Evidence in the literature suggests that companies with financial restrictions use the internal resources to maintain their activities, and this is a reality observed other contexts, such as the United States (Whited & Wu, 2006), United Kingdom (Bond et al., 2003), Germany (Audretsch & Elston, 2002), Czech Republic (Lyz & Svejnar, 2002) and Pakistan (Riaz et al., 2016). Almeida et al. (2004) argue that firms with constraints tend to accumulate the largest values in resource accounts for use in upgrade processes.

The costs are asymmetrical if they increase more when the activity rises than they decrease in the same proportion of activity to an equivalent amount (Balakrishnan et al., 2014; Banker et al. 2013; Weiss, 2010; Medeiros et al., 2005; Subramaniam & Weidenmier, 2003; Noreen & Soderstrom, 1997). According to Subramaniam and Weidenmier (2003), selling, general and administrative expenses do not present an

asymmetric behavior of costs for small variations in revenue, which means linearity of costs in relation to revenue.

Balakrishnan et al. (2014) emphasize that the idle capacity of companies can influence the behavior of costs. Calleja et al. (2006) found evidence that companies with higher levels of debt in their balance sheets, on average, do not present asymmetric costs. This fact can be explained as these companies need to meet the interest payments, and may be subject to greater oversight by creditors, making the managers guarantee a flexible cost structure, which is sensitive to changes in their terms of negotiation. Musso and Schiavo (2008) argue that the existence of financial constraints occurs due to the occurrence of any asymmetric information in costs, that is, the financial constraints are related to the asymmetric cost behavior.

The evidence found in the Brazilian context (Crisóstomo et al., 2014, Bassetto & Kalatzis, 2011) on financial constraints support the hypothesis that Brazilian companies facing financial constraints seek to adjust costs in the face of changes in revenues. Market imperfections affect firms' investment policy, so firms face financial constraints on investment (Riaz et al., 2016). Consequently, the financial situation is expected to affect the adaptation of cost behavior in Brazilian companies.

For Ibrahim and Ezat (2017) the deliberate decision and the managers' hesitation to reduce insufficient resources are the main reasons for the stick costs. Some managers are hesitant to cut resources when demand decreases, which implies that companies bear the costs of unused resources that they are not supposed to bear. In this sense, Venieris et al. (2015) highlight that during a decline in sales, managers' increase the slack of resources held by companies, which significantly affects the behavior of costs.

The economic theory of cost stickiness implies that cost stickiness arises from managerial optimal resource allocation decision rules (Chen et al., 2013). Ro et al. (2015) demonstrate that companies with financial constraints have low financial development, which causes the company to enter a crisis. Thus, company managers in financial constraints are subject to making decisions about allocating costs so that the company's performance.

The financial constraint corresponds to

companies with financial problems which reflects in higher costs, the economic theory of fixed costs predicts that companies with financial problems present greater rigidity in costs (that is, a greater degree of asymmetry in the responses of costs to increases versus decreases in sales). Thus, we formulate the following hypothesis on financial constraints and behavior of costs of Brazilian companies:

**H<sub>2</sub>:** *Companies listed on B3 with financial constraints adapt the asymmetry in cost behavior.*

### 3 Method and Research Procedures

In order to investigate whether the companies listed in B3 financially constrained adjust the cost behavior, descriptive, documentary and quantitative research were carried out. The research is documentary because the data source originated from the financial statements released by companies listed on B3. Thus, even though the data source was due to the specific information derived from economatica, it stopped with such information through the financial statements released by the companies during the study period.

The study population comprised the companies listed in B3 (Brazil). It is noteworthy that in the definition of the sample, companies in the financial sector were excluded in order not to distort the results due to the economic and operational characteristics that differ from other companies. Holdings and holding companies were also excluded because we will not have the same cut in costs due to a decline in sales revenues. These companies receive financial transfers depending on the economic group and their costs are linked only to the financial management of the business and, for this reason, cost cuts end up being less impacted. Companies with incomplete information on sales revenues, expenses, costs and the calculation of the financial constraint were also excluded from the sample.

In the end, companies with negative cash flow were excluded due to the financial constraint model. In this sense, the sample was composed of 834 observations between the period of 2006 and 2015. The model of asymmetric cost behavior is greatly affected by the institutional environment and, therefore, the choice of the studied period occurred due to the moment of economic and

political stability. experienced by Brazil. Table 1 shows the variables used in the research.

**Table 1.** Variables used in the research

Variable	Definition	Collect	Authors
Cost behavior	Total Costs	Economatica®	Subramaniam & Weidenmier (2003); Balakrishnan et al. (2014); Medeiros et al. (2005); Calleja et al. (2006); Anderson et al. (2007); Weiss (2010); Chen et al. (2012); Banker et al. (2013); Caylor & Lopes (2013); Banker et al. (2014); Richartz & Borgert (2014); Richartz et al. (2014); Marques et al. (2014).
	Liquid revenue of sales Gross Revenue - Sales taxes, returns, trade discounts and rebates.		Subramaniam & Weidenmier (2003); Balakrishnan et al. (2014); Medeiros et al. (2005); Calleja et al. (2006); Anderson et al. (2007); Weiss (2010); Chen et al. (2012); Banker et al. (2013); Caylor & Lopes (2013); Banker et al. (2014); Richartz & Borgert (2014); Richartz et al. (2014); Marques et al. (2014).

Source: Research data.

It is noteworthy that the data source came from the economatica software. In order to define whether the companies have financial restrictions, three criteria were used according to the study of Demonier et al. (2015): balance of cash and cash equivalents, investments in fixed assets and dividends distribution. For the classification of financially constrained companies, the criteria presented in Table 2 were followed.

**Table 2.** Criteria for identifying companies with financial restrictions

Criterion	Description	Grounding
Financial Restrictions	Positive change in the availability balance (Cash and cash equivalents + short - term investment) <sub>it</sub> - (Cash and cash equivalents +	According to Almeida et al. (2004), companies that demonstrate a high degree of financial constraints tend to keep higher amounts in cash, to

		short-term investment) <sub>it-1</sub>	use in unforeseen cases and thus not to take external resources, since it would be more expensive.
Negative or zero variation of investment in fixed assets	(Fixed Assets + Depreciation) <sub>it</sub> - (Fixed Assets + Depreciation) <sub>it-1</sub>		For Cleary (1999), the company that presents financial constraint seeks not to make investments with its own resources, so that in case it needs, it will not be forced to bear high capital costs.
Negative or nil variation of dividend distribution	((Distribution of dividends + IE) <sub>it</sub> /LL <sub>it</sub> ) - ((dividend distribution + JSCP) <sub>it-1</sub> /LL <sub>it-1</sub> )		Fazzari et al. (1988) point out that companies with financial constraints tend to maintain a higher profit value in order to cover possible contingencies because they present the cost of equity less than the cost of external capital.

Note: IE = Interest on Equity; LL = Net Income.

Source: Adapted from Demonier et al. (2015).

According to Table 2, companies with financial constraints show positive variations in the availability balance (Almeida et al., 2004; Demonier et al., 2015), negative or zero investment changes in fixed assets (Cleary, 1999; Demonier et al., 2015) and negative or null variations in the distribution of dividends (Fazzari et al., 1988; Demonier et al., 2015).

For the analysis of the data, descriptive statistics were initially performed and the results are then presented through the application of multiple linear regression, with the aid of SPSS® statistical software. To detect the effects of financial constraints, a dummy variable was developed, which assumed the value of 1 for companies with financial restrictions (according to the criteria shown in Table 2) and 0 for companies classified without financial restrictions.

Regarding the behavior of costs, the empirical model of analysis that verifies the reaction of costs through the variation of sales revenue is shown as follows:

$$\log \left[ \frac{\text{Total Costs}_{i,t}}{\text{Total Costs}_{i,t-1}} \right] = \beta_0 + \beta_1 \log \left[ \frac{\text{Revenue}_{i,t}}{\text{Revenue}_{i,t-1}} \right] + \varepsilon_{i,t}$$

Equation (1)

Subsequently, to analyze the relationship of companies with financial constraints and cost behavior, the following analysis model was used:

$$\log \left[ \frac{\text{Total Costs}_{i,t}}{\text{Total Costs}_{i,t-1}} \right] = \beta_0 + \beta_1 \log \left[ \frac{\text{Revenue}_{i,t}}{\text{Revenue}_{i,t-1}} \right] + \beta_2 \text{Financial Restriction} + \varepsilon$$

Equation (2)

For the analysis of cost behavior, there are two main variables: net sales revenue and total costs. The total costs are the sum of the Cost of Goods Sold (CGS) and the selling, general and administrative expenses (SG&A). The model is adapted from the studies of Anderson et al. (2003), Subramaniam & Weidenmier (2003) and Richartz et al. (2014).

Regarding the models, the equations presented consider the change in the index for the dependent variable "total costs" and the independent variable "net sales revenue", considering as the numerator of period t and denominator t-1. Thus, it is possible to verify the positive and negative changes in revenue in period t in relation to period t-1. The asymmetric cost variation should demonstrate  $\beta_1$  increase >  $\beta_1$  reduction. The analysis of the results is presented below.

It is said that the assumptions of multiple linear regression were met, and the data showed normality by the Kolmogorov-Smirnov test, in which all variables had a significance greater than 0.05. In addition, normality would be previously met by the number of observations contained in the model, in which the central limit theorem indicates acceptance of normality in models with more than 100 observations. Multicollinearity was also achieved because the models presented a VIF statistic of a maximum of 1.40. The autocorrelation of residues will be achieved by the durbin-watson test approaching 2.00 in all models. Finally, homoscedasticity was met by the pesarán-pesarán test in which the models showed an equal dispersion in the residues.

#### 4 Presentation and Analysis of Results

This session presents the description and analysis of the results. The results of the analysis of the behavior of the costs and inclusion of the financial constraint of the companies in the model, with the purpose of identifying the impact of the financial constraint on the behavior of the costs, are evidenced. Table 3 shows the descriptive statistics of the variables used in the study.

**Table 3.** Descriptive statistics of variables

Variable	Companies	Obs.	Mean	SD	Median	Maximum	Minimum
Cost	Restricted	66	0.04	0.25	0.05	0.7579	-
	Unrestricted	76	0.10	0.21	0.09	1.1257	-
Revenue	Restricted	66	0.03	0.23	0.05	0.5777	-
	Unrestricted	76	0.09	0.23	0.09	1.1521	-

Note: Obs: observation; SD: Standard Deviation.

Source: Research data.

In Table 3, comparing companies with financial restrictions and companies without financial restrictions, it is possible to verify that the cost and the average income of companies with financial restrictions were lower than the values presented by companies without financial restrictions. This result may be an indication that the less profitable companies deal with greater financial constraints due to the lack of perspective that the market can have on this, that is, the market prices the financial difficulties (Demonier et al., 2015).

Table 4 shows the asymmetric behavior of costs together with the financial constraint variable.

**Table 4.** Asymmetric behavior of costs in the increase and decrease of the Revenue

Panel A - Sample with increase in Sales Revenue			
Explanatory Variables	Dependent Variable		
	Model 1	Model 2	
	CTC	CTC	
	Coef./Sig.	Coef./Sig.	
(Constant)	0.025*	0.172*	
Inc.Rev.	0.815*		
Inc.Rev.*		0.397*	
Restriction.			
Sig. Model	0.000*	0.000*	
Durbin-Watson	1.927	1.970	
R squared	0.622	0.012	
N. of	601	601	

observations

Panel B - Sample with decrease in Sales Revenue		
Explanatory Variables	Dependent Variable	
	CTC	CTC
	Coef./Sig.	Coef./Sig.
(Constant)	0.019*	-0.088*
Dec.Rev.	0.805*	
Dec.Rev.*		0.803*
Restriction.		
Sig. Model	0.000*	0.000*
Durbin-Watson	1.968	1.875
R squared	0.659	0.234
N. of observation	233	233

\* Significance at the level of 5%.

CTC - change in total costs; Inc. Rev. - increase in sales revenue; Inc. Rev.\* Restriction - increase in sales revenue moderated by the dummy of financially constrained companies; Dec. Rev. - decrease in sales revenue; Dec. Rev.\* Restriction - decrease in sales revenue moderated by the dummy of financially constrained companies.

Source: Research data.

The Panel A of Table 4 demonstrates the results of three multiple linear regression models, the first one related to the asymmetric behavior of costs according to the increase/decrease in sales revenue. In addition, the second model shows the behavior of costs explained by the increase/decrease in sales revenue with variable financial restriction effect. Finally, the third model complements the analysis of the effect of variable financial restriction on the association between cost behavior and variation (increase/decrease) in sales revenue.

The results indicate, from model 1, that for every 1% increase in sales revenue the total cost tends to increase by 0.815% and, on the other hand, with every 1% decrease in sales revenue the total cost reduces by 0.805 %. In general, it can be inferred that there is asymmetry in the behavior of costs since the increase in revenue is reflected in a dramatic increase in costs and, on the other hand, the companies are able to adapt in costs by reducing it when the decrease in revenue of sales. In addition, it is noted that in general, in the companies analyzed the costs are considered less rigid.

From this result we can accept the H<sub>1</sub> study, hypothesis of the study since we found asymmetry in the cost behavior. The findings of this study converge with the results of previous studies carried out from this theoretical perspective. Thus corroborating with the sticky costs theory and the research developed by Anderson et al. (2003; 2007), Subramaniam and Weidenmier (2003),

Medeiros et al. (2005), Calleja et al. (2006), He et al. (2010), Porporato and Werbin (2012), Caylor and Lopez (2013), Marques et al. (2014), Balakrishnan et al. (2014), Banker et al. (2014), Ibrahim (2015) and Pamplona et al. (2016).

This fact can be explained by the arguments of Balakrishnan et al. (2014) because they point out that certain companies that perform at maximum capacity at a given moment are impacted by the volume of activities. In companies with idle capacity that can use this gap to meet the needs of increased demand do not require investments.

However, in the analysis of model 2 that reflects the effect of the financial constraint on the relationship between increase/decrease in sales revenue and cost behavior. The findings indicated that for every 1% increase in sales revenue, associated with financially constrained companies, the total cost increased by 0.397%. At the time of the decrease in sales revenue by 1%, the total cost also has a reduction of 0.803%. These results reveal that when the variable of companies with financial constraints was included, the asymmetric behavior of costs presented symmetry, that is, companies with financial constraints aim to adapt the behavior of costs in the face of reductions in revenues, which allows us to accept the hypothesis H<sub>2</sub>.

In view of these results, it can be concluded that financially constrained companies show an improvement in cost adaptation due to the increase and/or reduction in revenues, where the increase in revenue makes companies more efficient in the face of low-cost growth. On the other hand, when there is a reduction in revenues, companies with financial constraints can adapt costs almost to the same extent as companies without financial constraints. It is suggested that financially constrained companies take care of costs when there is an increase in revenues, a factor that can be explained by the need to increase cash for future investments and to honor their commitments. These findings confirm the arguments of Crisóstomo et al. (2014) because the authors consider that the companies considered a priori more prone to face financial constraints suffer more strongly the effects of market imperfections, being an exit to these companies the adjustment of the costs, as evidenced in this research.

Table 5 shows the summary of the existence of asymmetric cost behavior by comparing coefficients of variation of increase and decrease of revenue.

**Table 5.** Asymmetric cost behavior

Model 1	Model 2
No effect of Financial Restriction	With effect of Financial Restriction
Revenue increases by 1% and total cost increases by 0.815%	Revenue associated with Financial Restriction increases by 1% and cost increases by 0.397%.
Revenue decreases by 1% and total cost decreases by 0.805%	Revenue associated with Financial Restriction decreases by 1% and cost decreases by 0.803%.
<b>Asymmetry 0.01%</b>	<b>Symmetry -0.406%</b>

Source: Research data.

According to the results of Table 5, it can be seen that in the model that does not consider the effect of the financial constraint, the evidence shows that the behavior of costs is asymmetrical at 0.01%, that is, companies can adapt their costs of compatible with the increase or decrease in sales revenues. On the other hand, with the effect of the financial constraint, the findings suggest a symmetrical behavior of costs (-0.406%). This result indicates that financially constrained firms adapt costs more adequately to the increase and reduction of revenues when compared to companies that are not financially constrained.

Next, the research sample was separated into two clusters, the first being composed of companies that did not contain financial constraints and the second by companies with financial constraints.

In this sense, Table 6 shows the behavior of costs by the segregation of the sample of increase of sales revenue in companies with and without financial restriction.

**Table 6.** Asymmetry of costs in the clusters of the financial constraint due to the increase in sales revenue

Explanatory Variables	Cluster 1 No Financial Restriction	Cluster 2 With Financial Restriction	Adjustment of Costs as a result of the increase in revenue
	CTC	CTC	Cluster 1 – Cluster 2
(Constant)	0.026*	-0.003	
Inc.Rev.	0.806*	1.079*	-0.273
Sig. Model	0.000*	0.000*	
Durbin-Watson	1.947	2.123	
R squared	0.619	0.717	
N. of	557	44	

observation

Source: Research data.

In the group of companies with financial constraints, the findings determine that with each 1% increase in sales the total cost increases by 1.079%, however, among the group of companies without financial restriction, it is concluded that every 1% increase in sales revenue the total cost increases by 0.806%. It can be concluded that the group of companies without financial constraints shows an improvement in the adjustment of costs in view of the increase in revenues. The result can be explained by the need for larger investments by financially constrained companies when they grow their sales.

This result can be explained by the view of Crisóstomo et al. (2014) because the authors emphasize that capital market imperfections affect the investment of companies in Brazil and these effects are even stronger for financially restricted companies. Thus, according to Riaz et al. (2016), managers are motivated to increase the resources under their control because of a direct link between compensation and sales growth.

Table 7 shows the asymmetric behavior of costs by segregation of the sample of a decrease in sales revenue in companies with and without financial restriction.

**Table 7.** Asymmetry of costs in the clusters of the financial constraint by the decrease in sales revenue

Explanatory Variables	Cluster 1 No Financial Restriction	Cluster 2 With Financial Restriction	Adjustment of Costs due to Decrease in Revenues
	CTC	CTC	Cluster 1 – Cluster 2
(Constant)	0.014	0.020	
Dec.Rev.	0.735*	1.006*	-0.271
Sig. Model	0.000*	0.000*	
Durbin-Watson	1.787	1.902	
R squared	0.594	0.870	
N. of observation	208	25	

Source: Research data.

The results in Table 7 show that with every 1% decrease in sales revenue the cost reduces by 0.735%, which reveals that the costs are quite asymmetrical among the group of companies without financial restriction. On the other hand, in the group of companies with financial constraints,

the findings indicate that with every 1% decrease in sales revenue the cost reduces by 1.006%. This result suggests that financially constrained firms tend to improve costs adaptation, ie they can reduce costs by a greater proportion than the drop in sales revenues itself. The findings of the Brazilian studies on the subject of financial constraints (Crisóstomo et al., 2014; Bassetto & Kalatzis, 2011) support these results found in this research.

Finally, Table 8 shows the summary of the asymmetric cost behavior by the effect of the samples segregated by the financial constraint clusters.

**Table 8.** Summary of asymmetric cost behavior by the effect of samples segregated by financial constraint clusters

Cluster 1 – without financial restriction	Cluster 2 – with financial constraint
Revenue increases by 1% and total cost increases by 0.806%	Revenue increases by 1% and total cost increases by 1.079%
Revenue decreases by 1% and total cost decreases by 0.735%	Revenue decreases by 1% and total cost decreases by 1.006%
<b>Asymmetry 0.071%</b>	<b>Asymmetry 0.073%</b>

Source: Research data.

It is verified by grouping the asymmetric behavior of costs in function of the increase and decrease of revenues, that this was close between the companies without and with financial restriction. In spite of this, it should be noted that the best cost adjustment occurred in companies with a financial constraint due to the decrease in revenue, where costs can achieve an excellent adaptation. This finding was also found by Musso and Schiavo (2008) because the findings of this research revealed that the existence of financial constraints occurs due to the existence of asymmetric information in costs, that is, companies with financial constraints present adaptation in the asymmetric behavior of costs.

This finding reveals that the view of the traditional model of cost behavior does not really reflect the reality of Brazilian companies with and without financial constraints, since in this model it is assumed that costs change proportionally through changes in activity volume, regardless of whether these changes occur due to a reduction or increase in activity level. Moreover, this result contradicts the arguments of Calleja et al. (2006), since they consider that costs tend to be less asymmetric during long time horizons and when

companies have higher revenues. However, in this study 10 years were analyzed and in this period both companies with and without financial restrictions presented costs with asymmetric behavior.

In view of these results, it is pointed out that Brazilian companies offer a fertile field of study on financial constraints, since the findings of this research, the difficulty of obtaining capital at affordable interest rates by financial institutions and, on the other hand, which in a way reduces the characteristic of investment in the capital market by these companies. According to Crisóstomo et al. (2014), Brazil still has characteristics that generate higher external financing costs, since capital markets are still much less developed compared to the more advanced economies. Thus, cost adaptation becomes relevant in a financially constrained environment, where firms may choose to make more severe cuts in the face of reduced sales revenues because they are already in financial distress. On the other hand, in economic resumption, these companies may lose out because of the low investment capacity for growth at times of economic recovery.

Thus, although the changes achieved in Brazil represent advances in the capital market and economic stabilization, the low degree of shareholder and creditor protection, as well as high interest rates, may limit the access of Brazilian companies to external resources (Crisóstomo et al., 2014), which causes companies to adapt the behavior of costs, in view of the fluctuations in revenues. The evidence on financial constraints in Brazil (Crisóstomo et al., 2014; Bassetto & Kalatzis, 2011) and those found in the present study make it possible to support the H<sub>2</sub> hypothesis of the study. That Brazilian companies facing financial constraints seek to adjust costs in the face of changes in revenues, since market imperfections affect the investment policy of companies, so that companies face financial constraints (Riaz et al., 2016).

In addition, the institutional structure and capital market developments were not sufficient to reduce the high-interest rates in Brazil compared to European, North American or even undeveloped countries (Marques & Fochezatto, 2007). To get an idea, Marques and Fochezatto (2007) survey present data on interest rates for the year 2005 in different underdeveloped countries. Brazil has the highest interest rates (19.24%), followed by Russia

and Venezuela, with 13 and 12.7%, respectively. The other countries analyzed showed interest rates below 8%, reaching a minimum of 2.2% in China. Despite the fact that the data are from the year 2005, it is pointed out that up to now Brazil faces high-interest rates that often prevent companies from developing, and thus, these have financial restrictions, which also end up harming the behavior of costs, since companies need to adapt to them in order to continue competing in the market.

In general, these assertions could be verified in this research, since the results confirmed in all the models analyzed, for example, that companies with greater financial constraint consequently lead to a better alignment in the behavior of costs. Therefore, companies with lower availability of resources tend to make better adaptations of costs in response to changes in sales revenue.

Given the above results, it can be inferred that, given the importance of corporate investment for economic growth, at the political level, new institutional conditions should be created to improve the role of financial markets in financing business investment (Crisóstomo et al., 2014). Finally, the discussions and final considerations of the study are presented.

## 5 Discussion and Final Considerations

This research investigated the impact of financial constraint on asymmetric cost behavior in companies listed on B3 (Brazil), from a sample composed of 834 observations. Regarding the behavior of the costs, the findings revealed for the analyzed sample, that the costs presented asymmetric behavior in general since the increase of the total costs by the 1% increment in the revenue was superior when compared to the reduction of the total costs through a decrease of 1% of revenue. This result indicates that the behavior of the costs of the companies, in general is asymmetric and the increase of the costs through the increase of the revenue is superior when compared to the reduction of the costs due to a proportional decrease of the revenue.

In turn, the results indicated that companies with financial restrictions showed signs of adaptation in the behavior of costs since the results indicated symmetry when compared with companies without the effect of financial restriction. In this case, there are indications that companies in conditions of financial constraints



avoid increasing costs when sales revenue decreases, which allows a symmetry in the behavior of costs when the situation of resource constraints to the progress of activities. This practice can be motivated in the companies because of these aiming at a commitment with the interested parties when a decrease in the financial conditions of the companies, that is, when they are going through financial difficulties.

On the other hand, when segregating samples in companies with and without financial restrictions due to the increase and decrease in revenues, the results indicated an asymmetry in the behavior of costs for both groups. However, the best adaptation of costs occurred in companies with financial constraints from the analysis of the decrease in revenue, since the costs managed to achieve an excellent adaptation to this scenario when compared to companies without financial constraint. It is indicated by this result that companies with financial constraints can obtain a better adaptation in the behavior of costs when there is a decrease in sales revenue. In view of this result, it can be seen that Brazilian companies with and without financial constraint are supported by the theory of sticky cost since asymmetry was observed in the behavior of costs in the analyzed companies.

Moreover, this research suggests that the asymmetric adaptation in cost behavior in financially constrained firms is related to the fact that, if managers increased costs in the face of the sign of a bad financial condition for the market could reduce a reduction in sales revenue, access to credit as well as resources. Thus, this adjustment of costs in the face of a fall in revenues encourages these companies to reduce their total costs, in order to retain more cash for the development of their activities, even with the occurrence of financial restrictions.

In addition, another explanation for the adjustment of the total costs of financially constrained companies is that the reduction of cash/funds contributes to the increase of uncertainties about the return of capital lent by creditors, suppliers, and investors once that the profits are compromised, which would contribute to the increase of financial restrictions in subsequent periods. In this way, cost adjustment is a way out for companies that are experiencing financial constraints when there is a decrease in sales revenue.

Thus, the results found in this research confirm the hypothesis that companies with financial restrictions adapt the behavior of costs to financial reality since they can make cuts in expenses, both sales, general and administrative, in the face of a reduction in revenue of sales. In other words, companies with greater financial constraints lead to better alignment of costs, thus, companies with lower availability of resources tend to make better cost adjustments when changes in revenue occur. This behavior of companies can occur so that creditors, investors, and shareholders are not harmed by the company's situation.

In practical terms, companies with financial restrictions are characterized by the presence of low financial slack, which may explain the greater efficiency in adapting costs. It is likely that these companies are more active in the search for the protection of their resources, which are already scarce, in order to maintain competitiveness in future contingencies. In this sense, creditors and regulators to support new financing policies and to monitor corporate risks through financial statements (Demonier et al., 2015) can use this evidence.

In addition, companies facing financial constraints have limited access to credit markets and a high cost of capital (Kieschnick et al., 2013), which are factors that can explain the better adaptation of the cost cut in the face of a reduction in revenue. Thus, it is concluded that the financial slack (of companies without resource restriction) causes inertia in adapting the costs necessary to face unfavorable environments for companies.

In theoretical terms, it is proven that costs are less rigid in environments where the decision to use financial resources is not deliberate (Chen et al., 2013), a fact that occurs with companies with financial restrictions. The results corroborate Campello et al. (2010) and Crisóstomo et al. (2014), who state that there are deeper cuts in spending on companies with financial constraints due to the difficulty that they already face to normally manage their operations.

The results are useful in providing evidence that companies located in a developing country are able to better adapt their costs in the event of lost revenue. And this may be due to the difficulty of companies to raise funds from third parties at a low cost of capital, making financial constraint an intensifying factor in cutting costs. It is noteworthy that in developed countries companies are able to

raise funds in greater volume through the stock market and, with this, financial constraint would not become such a worrying factor to make drastic cuts in the moment that a strong loss of revenue occurs. These findings confirm the evidence of financial restrictions being present in companies with environments that have difficulty obtaining financial resources and with imperfect capital markets, which occurs in Brazil (Paulson & Townsend, 2004; Ro et al., 2017).

Finally, the results of this research contribute to accounting users, such as investors, creditors, government and suppliers, among others, by showing the possibility of identifying signs of financial constraints of a company from the analysis of its financial statements, and that these companies with financial. That way, constraints aim at adapting the asymmetry in cost behavior in the face of a reduction in sales revenue in order to improve the company's financial situation.

The limitation of this study is the methodology used to identify companies with financial constraints, since another way of identifying these companies may present different results. It is recommended, for future work, that the research sample is enlarged or modified since a new sample will allow the use of this study for the purpose of comparability of the results. In addition, it is suggested for future work the separate analysis of the total costs in view of an increase/decrease in sales revenue and the impacts of the financial constraint in this segregated analysis, since the total costs were analyzed together with the proposed theme.

## References

- Aldrichi, D. M., & Bisinha, R. (2010). Restrição financeira em empresas com ações negociadas na Bovespa. *Revista Brasileira de Economia*, 64(1), 25-47.
- Almeida, H., & Campello, M. (2001). Financial constraints and investment-cash flow sensitivities: New research directions. In: *Twelfth Annual Utah Winter Finance Conference*.
- Almeida, H., Campello, M., & Weisbach, M. S. (2004). The cash flow sensitivity of cash. *The Journal of Finance*, 59(4), 1777-1804.
- Anderson, M., Banker, R., Huang, R., & Janakiraman, S. (2007). Cost behavior and fundamental analysis of SG&A costs. *Journal of Accounting, Auditing & Finance*, 22(1), 1-28.
- Anderson, M. C., Banker, R. D., & Janakiraman, S. N. (2003). Are selling, general, and administrative costs “sticky”? *Journal of Accounting Research*, 41(1), 47-63.
- Audretsch, D. B., & Elston, J. A. (2002). Does firm size matter? Evidence on the impact of liquidity constraints on firm investment behavior in Germany. *International Journal of Industrial Organization*, 20(1), 1-17.
- Bassetto, C. F., & Kalatzis, A. E. (2011). Financial distress, financial constraint and investment decision: Evidence from Brazil. *Economic Modelling*, 28(1-2), 264-271.
- Balakrishnan, R., Labro, E., & Soderstrom, N. S. (2014). Cost structure and sticky costs. *Journal of management accounting research*, 26(2), 91-116.
- Banker, R. D., Byzalov, D., Ciftci, M., & Mashruwala, R. (2014). The moderating effect of prior sales changes on asymmetric cost behavior. *Journal of Management Accounting Research*, 26(2), 221-242.
- Banker, R. D., Byzalov, D., & Chen, L. T. (2013). Employment protection legislation, adjustment costs and cross-country differences in cost behavior. *Journal of Accounting and Economics*, 55(1), 111-127.
- Banker, R. D., Ciftci, M., & Mashruwala, R. (2008). Managerial optimism, prior period sales changes, and sticky cost behavior. *Social Science Research Network*.
- Bond, S., Harhoff, D., & Van Reenen, J. (2003). *Investment, R&D and financial constraints in Britain and Germany*. London: Institute for Fiscal Studies.
- Calleja, K., Steliaros, M., & Thomas, D. C. (2006). A note on cost stickiness: Some international comparisons. *Management Accounting*

*Research*, 17(2), 127-140.

- Campello, M., Graham, J. R., & Harvey, C. R. (2010). The real effects of financial constraints: Evidence from a financial crisis. *Journal of financial Economics*, 97(3), 470-487.
- Caylor, M. L., & Lopez, T. J. (2013). Cost behavior and executive bonus compensation. *Advances in Accounting*, 29(2), 232-242.
- Chen, Y. R., Huang, Y. L., & Chen, C. N. (2009). Financing constraints, ownership control, and cross-border M&As: evidence from Nine East Asian economies. *Corporate Governance: An International Review*, 17(6), 665-680.
- Chen, S., Ni, S. X., & Wu, D. (2013). Corporate Governance and the Asymmetrical Behavior of Selling, General and Administrative Costs: Further Evidence from State Antitakeover Laws. *SSRN Electronic Journal*.
- Chen, C. X., Lu, H., & Sougiannis, T. (2012). The agency problem, corporate governance, and the asymmetrical behavior of selling, general, and administrative costs. *Contemporary Accounting Research*, 29(1), 252-282.
- Cleary, S. (1999). The relationship between firm investment and financial status. *The Journal of Finance*, 54(2), 673-692.
- Cohen, S., Karatzimas, S., & Naoum, V. C. (2017). The sticky cost phenomenon at the local government level: Empirical evidence from Greece. *Journal of Applied Accounting Research*.
- Costa, C. M., Paz, L. S., & Funchal, B. (2008). Fluxo de caixa, ADRs e restrições de crédito no Brasil. *Brazilian Business Review*, 5(2), 144-151.
- Crisóstomo, V. L.; Iturriaga, F. J. L. & González, E. V. (2014). Financial constraints for investment in Brazil. *International Journal of Managerial Finance*, 10(1), 73-92.
- Danielson, M. G., & Scott, J. A. (2004). Bank loan availability and trade credit demand. *Financial Review*, 39(4), 579-600.
- Demonier, G. B., de Almeida, J. E. F., & Bortolon, P. M. (2015). O impacto das restrições financeiras na prática do conservadorismo contábil. *Revista Brasileira de Gestão de Negócios*, 17(57), 1264-1278.
- Farre-Mensa, J., Hegde, D., & Ljungqvist, A. (2016). *The bright side of patents* (No. w21959). National Bureau of Economic Research.
- Fazzari, S. M., Hubbard, R. G., & Petersen, B. C. (1988). Financing constraints and corporate investment. *Brookings Papers on Economic Activity* I: 141-95
- He, D., Teruya, J., & Shimizu, T. (2010). Sticky selling, general and administrative cost behavior and its changes in Japan. *Global Journal of Business Research*, 4(4), 1-10.
- Hoberg, K., Protopappa-Sieke, M., & Steinker, S. (2017). How do financial constraints and financing costs affect inventories? An empirical supply chain perspective. *International Journal of Physical Distribution & Logistics Management*, 47(6), 516-535.
- Ibrahim, A. E. A. (2015). Economic growth and cost stickiness: evidence from Egypt. *Journal of Financial Reporting and Accounting*, 13(1), 119-140.
- Ibrahim, A. E. A., & Ezat, A. N. (2017). Sticky cost behavior: evidence from Egypt. *Journal of Accounting in Emerging Economies*, 7(1), 16-34.
- Kaplan, S. N., & Zingales, L. (1997). *Do financing constraints explain why investment is correlated with cash flow?* (No. w5267). National Bureau of Economic Research.
- Kieschnick, R., Laplante, M., & Moussawi, R. (2013). Working capital management and shareholders' wealth. *Review of*

*Finance*, 17(5), 1827-1852.

Korajczyk, R. A., & Levy, A. (2003). Capital structure choice: macroeconomic conditions and financial constraints. *Journal of Financial Economics*, 68(1), 75-109.

Lanen, W. N., Anderson, S. W., Maher, M. W., & Dearman, D. T. (2011). Fundamentals of cost accounting. *Issues in Accounting Education*, 25(4), 791-792.

Marques, A. M., & Fochezatto, A. (2007). Taxa de juros e prêmio de risco: investigando a hipótese Bresser-Nakano para a economia brasileira, 1995-2005. *Revista de Economia Contemporânea*, 11(2), 351-375.

Marques, A. V. C., Santos, C. K. S., Lima, F. D. C., & Costa, P. de S. (2014). Cost stickiness in Latin American open companies from 1997 to 2012. *European Scientific Journal*, ESJ, 10(10), 270-282.

Medeiros, O. R. D., Costa, P. D. S., & Silva, C. A. T. (2005). Testes empíricos sobre o comportamento assimétrico dos custos nas empresas brasileiras. *Revista Contabilidade & Finanças*, 16(38), 47-56.

Musso, P., & Schiavo, S. (2008). The impact of financial constraints on firm survival and growth. *Journal of Evolutionary Economics*, 18(2), 135-149.

Noreen, E., & Soderstrom, N. (1997). The accuracy of proportional cost models: evidence from hospital service departments. *Review of accounting Studies*, 2(1), 89-114.

Oliveira, F. N. D. (2019). Investment of Firms in Brazil: do financial restrictions, unexpected monetary shocks and BNDES play important roles?. *Revista Brasileira de Economia*, 73(2), 235-251.

Palkar, D. D. (2017). Cash flow volatility-return relation and financial constraints: international evidence. *Managerial Finance*, 43(3), 354-378.

Pamplona, E., Fiirst, C., Silva, T. B. de J., & Revista de Negócios, v. 26, n. 1, p. 6-21, January, 2021.

Zonatto, V. C. da S. (2016). Behavior of costs focused on sticky costs of the largest companies in Brazil, Chile and Mexico between 2002 and 2013. *Contaduría y Administración*, 61(4), 682-704.

Paulson, A. L., & Townsend, R. (2004). Entrepreneurship and financial constraints in Thailand. *Journal of Corporate Finance*, 10(2), 229-262.

Porporato, M., & Werbin, E. (2012). Evidence of sticky costs in banks of Argentina, Brazil and Canada. *International Journal of Financial Services Management*, 5(4), 303-320.

Riaz, Y., Shahab, Y., Bibi, R., & Zeb, S. (2016). Investment-cash flow sensitivity and financial constraints: evidence from Pakistan. *South Asian Journal of Global Business Research*, 5(3), 403-423.

Richartz, F., & Borgert, A. (2014). O comportamento dos custos das empresas brasileiras listadas na BM&FBOVESPA entre 1994 e 2011 com ênfase nos sticky costs. *Contaduría y administración*, 59(4), 39-70.

Richartz, F., Borget, A., & Lunkes, R. J. (2014). Comportamento Assimétrico dos Custos nas empresas Brasileiras listadas na BM&FBovespa. *Advances in Scientific and Applied Accounting*, 7(3), 339-361.

Ro, Y. J., Kim, I. C., & Kim, J. W. (2017). Financial development and investment in Korea. *Emerging Markets Finance and Trade*, 53(3), 534-543.

Venieris, G., Naoum, V. C., & Vlismas, O. (2015). Organisation capital and sticky behaviour of selling, general and administrative expenses. *Management Accounting Research*, 26, 54-82.

Silva, A. D., Zonatto, V. C. D. S., Magro, C. B. D., & Klann, R. (2019). Sticky Costs Behavior and Earnings Management. *Brazilian Business Review*, 16(2), 191-206.

Subramaniam, C., & Weidenmier, M. L. (2003).

Additional evidence on the sticky behavior of costs. M. J. Neeley School of Business - Texas Christian University.

Xu, J., & Sim, J. W. (2017). Are costs really sticky and biased? Evidence from manufacturing listed companies in China. *Applied Economics*, 49(55), 5601-5613.

Weiss, D. (2010). Cost behavior and analysts' earnings forecasts. *The Accounting Review*, 85(4), 1441-1471.

Whited, T. M., & Wu, G. (2006). Financial constraints risk. *The Review of Financial Studies*, 19(2), 531-559.

## International Ambidexterity: a competitive advantage of fashion industry firms in emerging markets

Monica Facchini Krinke<sup>1</sup>, Dinora Eliete Floriani<sup>2</sup>, Giovana Bueno<sup>3</sup>, Ivan Lapuente Garrido<sup>4</sup>

<sup>1</sup> Universidade do Vale do Itajaí (UNIVALI) - [monica.krinke@univali.br](mailto:monica.krinke@univali.br)

<sup>2</sup> Universidade do Vale do Itajaí (UNIVALI) - [dinora@univali.br](mailto:dinora@univali.br)

<sup>3</sup> Universidade do Vale do Itajaí (UNIVALI) - [giovanabueno2014@gmail.com](mailto:giovanabueno2014@gmail.com)

<sup>4</sup> UNISINOS Business School - [garrido@unisinosschool.com.br](mailto:garrido@unisinosschool.com.br)

### KEYWORDS

International Ambidexterity;  
Simultaneous Ambidexterity;  
Competitive Advantage;  
Emerging Economies;  
Dynamic Capabilities.

Received 04.02.2021

Accepted 11.02.2021

ISSN 1980-4431

Double blind review



### ABSTRACT

Firms from emerging markets (EMs) which are characterized by uncertainty and dynamism need to develop an ambidextrous approach in order to manage the dimensions of exploitation and exploration (E&E) and transform them into competitive advantages. However, there is not consensus on the ideal balance between exploitation and exploration within academia yet. The objective of this study aimed to understand the relationship between international commitment and international ambidexterity as a means of explaining competitiveness in fashion industry firms in EMs. We used a qualitative research was carried out through a multiple case study in three prominent companies in the Brazilian Fashion Industry. Our results showed the simultaneous international ambidexterity as a key element for building competitive advantage, driving the growth of firms from EMs and enabling them to survive in global markets. Our study seeks to provide insights into the importance of internationalization for the development of dynamic capabilities and consequently of increased international commitment through international ambidexterity.

### PALAVRAS-CHAVE

Ambidestria Internacional;  
Ambidestria Simultânea;  
Vantagem Competitiva;  
Economias Emergentes;  
Capacidades Dinâmicas.

### RESUMO

As empresas de mercados emergentes (MEs), que se caracterizam pela incerteza e dinamismo, precisam desenvolver uma abordagem ambidestra para gerenciar as dimensões de exploração e exploração (E&E) e transformá-las em vantagens competitivas. No entanto, ainda não há um consenso sobre o equilíbrio ideal entre a exploração e exploração dentro da academia. O objetivo deste estudo foi compreender a relação entre o comprometimento internacional e a ambidestria internacional como meio de explicar a competitividade em empresas da indústria da moda em MEs. Utilizamos uma pesquisa qualitativa realizada, por meio de estudo de casos múltiplos, em três empresas de destaque na Indústria da Moda Brasileira. Nossos resultados mostraram a ambidestria internacional simultânea como um elemento chave para a construção de vantagem competitiva, impulsionando o crescimento de empresas de MEs e permitindo-lhes sobreviver em mercados globais. Nosso estudo busca fornecer insights sobre a importância da internacionalização para o desenvolvimento de capacidades dinâmicas e, consequentemente, de um maior compromisso internacional por meio da ambidestria internacional.

## 1 Introduction

In highly competitive global markets, internationalization provides firms with the option of diversifying the markets (Ojala, Evers, & Rialp, 2018). The internationalization process is marked by complexity and uncertainty (Vahlne & Johnson, 2017). This requires not only management skills (Cuervo-Cazurra, Ciravegna, Melgarejo & Lopez, 2018) but also an ambidextrous stance (Tsai & Ren, 2019). Through ambidexterity, firms simultaneously work to improve their existing capabilities (exploitation) and seek new capabilities (exploration) enabling them to survive in the international markets (Prange & Verdier, 2011).

There have been many advances achieved in discussions about international ambidexterity and its current importance for firms however, the subject is still relatively recent and empirical studies are needed (Chang, Hughes, & Hotho, 2011; Deng, Liu, Gallagher, & Wu, 2018; Hsu; Lien, & Chen, 2013). Results have shown to be controversial when it comes to the balance between exploration and exploitation capabilities and the impact of ambidexterity on competitive advantage and the advantages of firms operating in international markets (Jurkisiene & Pundziene, 2016; Li & Liu, 2014; Schilke, 2014). Especially in sectors in uncertain environments like those in emerging economies (Deng et al., 2018; Prange & Verdier, 2011).

This study aims to understand the relationship between international commitment and international ambidexterity as a means of explaining the competitiveness in the fashion industry firms from EMs. To achieve this, a qualitative research using a multiple case study was conducted focusing on three firms in the Brazilian Fashion Industry that met specific selection criteria. The fashion industry is an appropriate field of study because international competition is affected by characteristics intrinsic to the sector, such as constant innovation, the short lifecycle of products, seasonality, volatility, forecasting difficulties (trends) and diversity of product offers. In this scenario, firms that can balance exploitation and exploration capabilities in an ambidextrous manner will have a greater chance of success considering the knowledge accumulated through experience (Čiarnienė & Vienažindienė, 2014).

This research contributes to literature on

internationalization of firms from EMs, especially related to international ambidexterity, in three respects. First, it provides evidence indicating that international commitment is linked with development of E&E capabilities when simultaneously managed. Second, it shows that simultaneous international ambidexterity gives firms a competitive advantage, boosting growth and survival in the international market. Finally, it presents that this allows these firms to offset the disadvantage of liabilities of outsidership and origin learning from the host environments. Whilst still absorbing knowledge from their international networks (Cuervo-Cazurra, 2012; Johnson and Vahlne, 2009; Li & Fleury, 2020; Luo & Rui, 2009). The managerial contribution of this article is to draw the attention of practitioners working in EMs fashion industries to the importance of international commitment. So as to generate competitive advantages by achieving an effective balance between exploration and exploitation capabilities.

The next section of this article discusses internationalization, international ambidexterity, and competitive advantage. Then, the methodology used is outlined followed by the description and analysis of the cases. After, the presentation of the theoretical propositions and finally the paper concludes with some final considerations and proposals for future research.

## 2 Theoretical Framework

### 2.1 International Ambidexterity

Internationalization has been associated with international ambidexterity within the perspective of Dynamic Capabilities (Prange & Verdier, 2011; Prange, 2012; Vahlne & Jonsson, 2017; Wang, 2016; Zhou, Lu, & Chang, 2016). In this sense, the concept of International Ambidexterity encompasses the capacity to balance the capabilities of Exploration and Exploitation (Prange & Verdier, 2011; Prange, 2012). It is considered that while they mutually reinforce each other, they also compete for existing resources (March, 1991; Luger, Raisch, & Schimmer, 2018).

Furthermore, the term ambidextrous firm denotes the ability of a firm to deal effectively with exploitation of its current capabilities and with exploration of new competencies that will affect its future (March, 1991; Vahlne & Jonsson, 2017).

Exploration means exploring new resources and capabilities with an active objective, through research, experimentation, and variation (March, 1991). Thus, it involves experimentation, risk-taking, flexibility, innovation and may lead to uncertain and even negative returns. The development of new technologies, new markets, new knowledge and new capabilities provide returns (Deng et al., 2018; Lin & Si, 2019; Prange & Verdier, 2011; Prange, 2012). They are determined by competence in seeking, acquiring and attracting external resources (Lin & Si, 2019; Prange & Verdier, 2011; Prange, 2012).

Exploitation capacity involves using the firm's existing resources and capabilities, encompassing refinement, productivity, efficiency and development of existing resources and competencies (March, 1991). It requires firms to efficiently increase and expand the use of internal assets (Lin & Si, 2019; Teece, 2014) in seeking to increase the efficiency of their current operational capabilities (Lin & Si, 2019). Exploitation is linked to firms accumulated learning processes and knowledge, permeating its international experience (Hsu et al., 2013; Lin & Si, 2019; Vahlne & Jonsson, 2017).

International ambidexterity strategies can be implemented in two ways: targeting sequential ambidexterity or simultaneous ambidexterity (Deng et al., 2018; Prange, 2012). Sequential ambidexterity encompasses behaviour that is cyclical over time, alternating focus and resources between exploitation and exploration capabilities (Prange, 2012). Moreover, Deng et al. (2018) propose that sequential behaviour as part of internationalization may start either with exploitation or with exploration. It depends on the resources and capabilities that the firm holds at a given time and whether it intends to expand into markets that are more or less developed than its market of origin. This kind of strategy may enable better resource allocation, since priority is given to one competency at a time. However, it could also make it difficult to compete in faster-moving markets (Prange, 2012) and it depends on the characteristics of each firm that these behaviours occur (Deng et al., 2018).

Simultaneous ambidexterity requires the firm to deal with its exploitation and exploration capabilities at the same time (Deng et al., 2018; Prange, 2012). Implementation is normally achieved by dividing the firm into units that are

specifically dedicated to one or the other capabilities. This tends to make it more difficult for firms to avoid isolation, competition, and difficulties with transfer of knowledge among units (Prange, 2012). Hence, simultaneous ambidexterity is dependent on the firm's dynamic capacity to realign its resources and capabilities to efficiently integrate both internal and external environments (Deng et al., 2018). While exploration appears to be more linked to future competitiveness, to firm continuity and to long-term growth, exploitation is more related to current survival and to competitiveness. The priority is focused on increasing efficiency of current resources and competencies. The firm's returns depend on its capacity to intentionally create, extend and modify its resource base by using exploitation and exploration capabilities (Helfat & Peteraf, 2009; Vahlne & Jonsson, 2017).

## **2.2 Ambidexterity and international commitment.**

Experiences in international markets stimulate innovation and creation of capabilities and competencies hence influencing the reach of international ambidexterity (Figueira-de-Lemos, Johanson, & Vahlne, 2011; Hsu et al., 2013; Lessard, Lucea, & Vives, 2013; Li & Fleury, 2020; Luo & Bu, 2018; Riviere & Suder, 2016). A firm's commitment to international markets involves making strategic decisions related to entry mode selection and markets the firm will choose to start or continue its internationalization process (Vahlne & Jonsson, 2017). These strategies can vary in activities ranging from simple operations, such as indirect exports, to complex operations involving greater resource allocation, such as establishment of foreign subsidiaries (Luo, 2002).

The entry mode chosen by a firm depends on the systematic capacity to integrate, configure and combine new resources in response to market threats and opportunities (Eisenhardt & Martin, 2000; Teece, 2007; Teece; Pisano; Shuen, 1997). This includes choosing the best strategy to manage the business' activities, the entry mode and the host country chosen. Moreover, a firm's level of involvement in the international market determines its contact with different consumers and competitors, additional opportunities and new knowledge. All of which reconfigure new processes, access to new resources and assimilation of new cultures (Luo, 2002; Johanson & Vahlne,



2009; Vahlne & Jonsson, 2017).

In an analysis expanding the Uppsala model, Vahlne and Jonsson (2017) proposed that increases in a firm's level of commitment to internationalization lead to a new state, in terms of capabilities for development of opportunities, networking, globalization and ambidexterity. Additionally, Cho and Jin (2015) found that a greater level of foreign networking enables a firm to learn foreign consumers' preferences and needs, the market system and even commerce regulations, which in turn positively influence the firms' international market involvement.

### **2.3 International Ambidexterity as a Competitive Advantage**

A company's success or failure in international competition may be reflected by the firms' competitive advantage, as it is the result of creating value for customers in a more effective manner than competitors (Alänge & Steiber, 2018; Barney, 1991; Peteraf & Barney, 2003). From the Dynamic Capabilities perspective, competitive advantage is explored in terms of activities for learning, knowledge acquisition and optimization of resources (Teece, 2007). They are combined with innovative capacity (Ridder, 2012), international knowledge and learning (Vahlne & Jonsson, 2017), international marketing networks (Peng & Lin, 2019), internationalization velocity (Lin & Si, 2019) also survival and growth (Deng et al., 2018; Prange, 2012; Vahlne & Jonsson, 2017). Pereira et al., (2019) observed that greater investment in dynamic capacity allows multinationals in emerging markets to develop skills through knowledge management, have more agility and sustain competitiveness in European markets.

Furthermore, specifically in the context of the fashion industry competitive advantage is associated to value creation. This may be related to differentiation strategies, incorporation of technology or handmade detailing (Rybalowski, 2008) to product selection, price, branding, value added services, relationships and experiences (Simchi-Levi, Kaminsky, & Simchi-levi, 2009). Also, environmental sustainability, social responsibility, firm origins and sales outlets (Cietta, 2017) or even 3D technology (Lyu, Hahn, & Sadachar, 2018). They can also be seen as value creators for these firms. A study by Ma and Hu (2017) relates competitive advantage to the

internationalization of fashion industry firms from Shanghai. The study revealed that four factors are important to these firms' competitive advantage: (i) creative design; (ii) opening new markets as result of access to information, personality and diversified demand of consumers; (iii) new media platforms for marketing and (iv) crossover fusion.

However, to achieve a competitive advantage, fashion industry firms need a large range of products, rapid product innovation and rapid launch of new products according to Čiarnienė and Vienažindienė (2014). Firms must constantly deal with the challenges of serving their customers at the same time as developing new products and services or business models (Alänge & Steiber, 2018). Thus, these inferences help to highlight the importance of developing international ambidexterity as a source of competitive advantage, generating good performance and having a positive impact on the likelihood of a firm's survival in the international scenario. (Gibson & Birkinshaw, 2004; Prange & Verdier, 2011).

### **2.4 Conceptual Model**

Over the past twenty-five years, the fashion industry has evolved significantly forcing retailers to develop strategies founded on design, quality and speed in order to maintain a profitable position (Bhardwaj & Fairhurst, 2010) and a competitive advantage in an increasingly demanding market (Čiarnienė & Vienažindienė, 2014). In 2019, Brazilian exports of clothing increased by 33.29% compared to the previous year. In 2018, Brazil had the fifth largest textile sector in the world with 29 thousand registered companies, 1.5 million direct employees and 8 million jobs indirectly dependent on the sector. Those of whom 75% were women, making it the country with the largest complete textile production chain in the Western world (Brazilian Textiles Industry Association [ABIT], 2020).

Nevertheless, while there are opportunities of expansion in external markets, the Brazilian fashion industry still faces several challenges when establishing a foothold abroad (Ferranti & Sutter, 2017). Firms based in emerging markets are often classified as late movers in international business literature because they are deficient in resources and lack international experience. Consequently making them less competitive than their competitors from developed countries (Deng et al.,

2018). Therefore,, a conceptual model of the relationship between international commitment and international ambidexterity as a means of

explaining the competitiveness of firms from emerging countries was elaborated (Figure 1).

**Figure 1.** Conceptual Model



For firms to be competitive in international markets, they must also sustain a competitive advantage in dynamic environments (Teece, Pisano, & Shuen, 1997; Wang & Ahmed, 2007) by improving quality, developing new products and investing in marketing and communication strategies. This can prepare firms to deal with turbulent and changing environments (Duarte Alonso & Kok, 2019). This is why scholars argue in favour of international ambidexterity as a source of competitive advantage (Deng et al., 2018; Floriani, Borini, & Fleury, 2009; Tsai & Ren, 2019; Wu & Wu, 2016), claiming that firms not only need to succeed in developing E&E capabilities but must also learn to balance them out (Prange, 2012).

### 3 Methodology

The research method used in this study was qualitative and the design is a multiple case study (Eisenhardt 1989). Having applied a process approach to analyse International Ambidexterity as a means of achieving competitive advantage and taking into account the emerging markets' context. According to Birkinshaw et al. (2011), process approaches are appropriate for investigating international ambidexterity within complex international business phenomena.

#### 3.1 The selection of case studies

The strategy adopted for the selection of cases was intentional (Patton, 1990) aiming to

obtain a relevant sample, in terms of, firms representative of the Brazilian fashion industry and suitable within the research objectives (Eisenhardt & Graebner, 2007; Fletcher & Harris, 2012). They were selected based on the following criteria:

(i) All firms had to be from the fashion industry. The choice of the fashion industry as object of analysis is justified by its importance in the country under analysis. It is the second largest sector in terms of the number of firms and employees and it has won global recognition in several areas, such as Beachwear, Jeanswear and Fitness apparel. Brazil also has the largest complete textile chain in the Western world with more than 200 years of history.

(ii) It was selected different sized firms (measured by the total number of employees) to guarantee diversity;

(iii) The company's age and period of time since it began doing business abroad were also considered important in view of the decision to adopt a process approach to the analysis and the complexity of international ambidexterity over time. Longer-term international involvement offers the possibility of conducting a linear analysis of the internationalization process;

(iv) Internationalization mode (firms representing different levels of international commitment). One of the firms has intense foreign activity growth, a second has moderate foreign activity growth, and the third has low foreign activity growth. The three intensities of growth of international activity offer a wider perspective on the influence of international ambidexterity on the

internationalization process and on firm competitiveness and offer variation in the sample.

(v) Activities in different areas of the fashion industry with distinct products and regional importance in terms of market share and brand recognition;

(vi) Sampling strategy controls in the case of only one country (Brazil) was chosen because of the strong EM country-of-origin effect (Cuervo-

Cazurra & Ramamurti, 2014).

Overall, three firms were chosen following these criteria. They were given the pseudonyms: Alpha, Beta and Zeta in order to ensure privacy and preserve anonymity for the firms' participants of the study. The firms analysed are not direct competitors thus, ensuring an analysis with empirically independent observations. Table 1 lists details of the firms selected.

**Table 1.** Descriptive information of the three firms

Firms	Main activity	Number of employees	Years in business	Years in international business	Internationalization Modes	Foreign Sales	Entry Modes
Alpha	Shirts	1,500	62	39	Private Label; Store; Franchise	25%	Franchises in Sweden, Paraguay, Italy, Colombia, and Ghana.
Beta	Fitness Clothing	350	12	7	Office abroad; e-commerce; Distributor; Franchise	15%	Own retail outlets in Bolivia, Colombia, Spain, USA, Mexico and Russia.
Zeta	Beachwear	70	32	11	Direct Exports	5%	Exports to nearby countries

### 3.2 Data sources

Throughout the study, historical and processual data were collected to align real time and retrospective elements. The interviews were designed to provide a longitudinal perspective on the cases, which better captured the dynamics of the internationalization process over time (Pettigrew, 1990). The fieldwork consisted of 10 in-depth interviews for all the firms, covering approximately 14 hours of recordings and 75 pages of transcripts. All conducted and documented with full authorization from all participants (Table 2).

There were at least two researchers present during the interviews, enabling them to discuss each interview after the fact. This contributed to the study's reliability and helped to guarantee greater analytical consistency taking into account that investigators had different views (Creswell, 2010). In addition, all the interviews were recorded using

a digital device, they were then transcribed and crosschecked by both researchers to avoid any discrepancies. The interviews were conducted in Portuguese. After the transcription, a native English speaker, who has a thorough knowledge of both Brazilian-Portuguese and English, translated the most important passages from the interviews. The interviews were conducted from October 2017 to February 2019. These interviews were held at the firms' headquarters, using a single interview script based on the variables under analysis and their conceptual and operational aspects (Table 3). As secondary data, the firms delivered presentations describing their internationalization processes at an industry event, which generated additional information, enabling comparison and confirmation of the data collected during the interviews.

**Table 2.** Descriptions of Interviewees

Firm	Informant	Role at firm	Time at firm	Duration of interview
	I1	International Business Manager	8 years	1h 53min
	I2	Manager of brand's creative department	25 years	1h 17min

Alpha	I3	International Business Manager.	10 years	1h 15min
	I4	Exports analyst	5 years	50min
Beta	I5	Manager	10 years	1h
	I6	International Business Director	5 years	1h 48min
	I7	Head of brand's creative department	5 years	1h 30min
	I8	Marketing Manager	5 years	1h 20min
	I9	International Business and Marketing Manager	11 years	1h 10min
Zeta	I10	Designer	5 years	1h 30min

---

**Table 3.** Analytical Categories and Research Protocols

	Categories (Coding)	Description	Authors
International Commitment	International market entry modes	Companies can use different entry modes to achieve international ambidexterity	Vahlne and Jonsson (2017)
International Ambidexterity	Exploitation Capabilities (training, efficiency, execution, implementation, information, improvement, partnerships, process, production and product)	Improvement of existing capabilities related to refinement, choice, production, efficiency, selection, implementation and execution.	March (1991), Eisenhardt and Martin (2000), Teece (2007), Vahlne and Jonsson (2017)
	Exploration Capabilities (learning, acquisition, discovery, innovation, new strategies, new partnerships, new technologies, new process, new product, new channels, new competitors, new markets, risk-taking and decision making)	Learning and developing new skills in areas where the company has no experience. Capabilities related to seeking new and varied opportunities, decision-making, risk-taking, experimentation, flexibility, discovery and innovation.	March (1991), Prange and Verdier (2011), Prange (2012), O'Reilly and Tushman (2013), Zhou et al. (2016), Wang (2016), Vahlne and Jonsson (2017)
Competitive Advantage	Quality, design, distribution, culture, brand, image/ symbolic value, sustainability or innovation and communication strategies.	Linked to the value creation strategies adopted by the firm (March, 1991) through use of internal and external resources and resulting from the experiential learning developed along the course of the firm's path to date.	March (1991), Teece (2007), Vahlne and Jonsson (2017)

Moreover, bibliographic resources were used to ensure the most reliable and impartial analyses as possible and to enable logical links to be drawn between pieces of evidence (Yin, 1984). Resources from both printed and in digital formats were used throughout the analysis; these included internal company reports, news items, videos available on the firms' websites and others made available on YouTube by the firms and articles in specialist journals. During the field trips made to conduct the interviews, field notes were also taken on observations of the location and informal contact that took place at the firms' facilities. Triangulation of primary and secondary data, observations and analysis in the light of the theoretical framework enhance the study's reliability. The content analysis technique was used for analysis and interpretation of the data.

## 4 Data Analysis

The multiple case study is presented in this paper as recommended by Eisenhardt (1989), describing the following dimensions for each firm: a) its internationalization process; b) development of E&E capabilities and c) competitive advantage. The most pertinent comments made by the interviewees were analysed in conjunction with the secondary data (Table 3), providing a broader picture of each case. The histories of each firm was traced to construct a visual map of its internationalization process illustrating the most important events that enabled it to develop international ambidexterity.

The cases were cross-compared to identify patterns, similarities and differences. As well as the main aspects that enabled E&E capabilities to contribute to the development of a competitive advantage. Each firm's critical events were analysed and identified along with the internal and external resources involved in their E&E capabilities and internationalization processes. Primary and secondary data were used to draw connections between the evidence of the cases and the theoretical literature. Finally, the identified E&E resources were analysed to define the types of International Ambidexterity developed by each company in the course of its internationalization processes, which lead to the formulation of the proposals in this research.

### 4.1 Single case analyses

#### 4.1.1 Alpha

This firm is a high-end clothing manufacturer and distributor. It is a family-run business, founded in 1960, it began retailing its products under its own brand through flagship outlets in airports located in its domestic market (Brazil). Through this distribution channel, the firm's products began to build brand recognition in the international market as well and the firm gradually built up a solid retail business internationally.

a) The *Internationalization process*: The firm started its internationalization process by exporting directly to Latin American countries in the 1970s. By 2003, the firm was exporting 22% of its production through private labels from large European firms, such as Armani, Zara and others. During this phase, the firm promoted its products through international partnerships and at global fashion fairs and events. In 2012, it opened a showroom in Milan (Italy), raising its profile in the European market. Initially, the firm had intended to expand its international business using a strategy based on selling to multi-brand stores and department stores. However, the firm realigned its strategy, changing the focus from multi-brand stores to a strategy based on franchises. This change was based on the success of its retail sales in the Brazilian market and the firm decided to continue using the model which it was already familiar with. By 2017, the firm owned 22 franchised stores around the world. At that point, the firm was using print media to showcase its products in the international market (in specialist fashion magazines) and promoting its products at parties (to influential people in European social media) with the support from the Brazilian embassy in Milan.

b) *Development of E&E capabilities*: The firm's path to the international markets demanded that it is adapted to the international quality standards, resulting in development of its exploitation capabilities. The firm invested significantly in improving processes and training human resources. Private label production for internationally recognized brands such as Lacoste, Armani and others, entailed building new capabilities. The firm hired a Spanish expert to take on the responsibility of restructuring production and implementation of continuous improvements; these ranging from internal communication to the cut, fit, and finish of products to meet the demands

of major brands.

The new capabilities led to a review of the strategic decision-making process in relation to internal and external resources, which in turn led to an accumulation of expertise and international recognition of the quality and finish of the firm's products. Alpha's private label production activities developed its exploration capabilities, as result of investments in modern technology and machinery that gave the firm an edge over its competitors in the domestic market. Opening new markets also attracted external resources through strategic partnerships, which made it possible to expand into new markets (Eisenhardt & Martin, 2000; Hsu et al., 2013). After its market entry via the private label strategy, the firm developed sequential ambidexterity, when it first developed a structure for distribution of its brands in the domestic market and then replicated the strategy to open franchises in the foreign market.

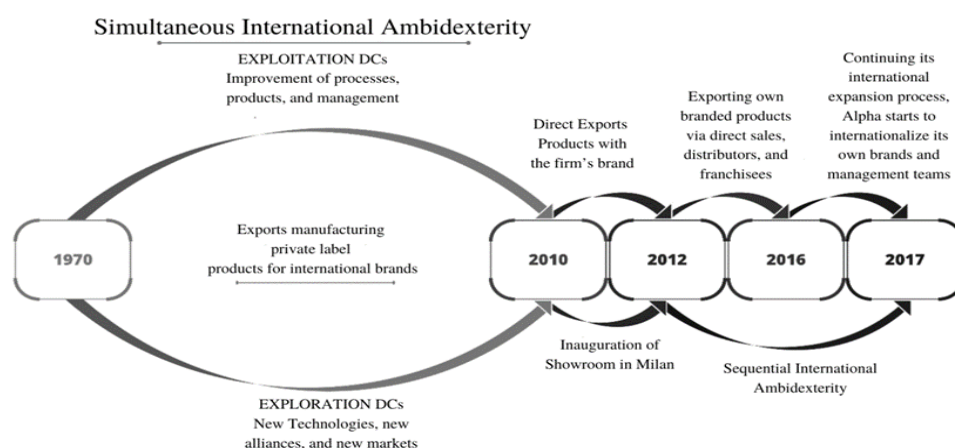
Whilst benefiting from its already established foreign markets, it started to invest in internationalization of its own brand. At this point, the firm had built both exploration capability (through its acquisition of new technologies and entry to new markets) and exploitation capability (through improvements in the quality of its processes and products), achieving simultaneous international ambidexterity (Figure 2), enabling it to combine its E&E capabilities in an ambidextrous configuration (Prange & Verdier, 2011; Teece, 2014).

Figure 2 illustrates the firm's internal and external moves along its path. The experience and knowledge the firm absorbed from the international

market, first by providing private label services to international brands and later, as it conducted international business more directly in foreign markets, with products bearing its own brand, these moves contributed significantly to the firm's ability to achieve international ambidexterity. Moreover, its ability to absorb simultaneous international ambidexterity enabled the firm to become consolidated in both its domestic and foreign markets. The firms' differentiation from competitors led to its acquisition of international investment funds in 2017, enabling further expansion of its operations in international markets. By 2018, the company, now owned by a new investment group, was considered the largest high-end clothing company in Brazil.

c) *Competitive advantage*: The quality of its products is a competitive advantage, which the firm achieved by managing its dynamic exploitation and exploration capabilities. The firms' employees are trained by major international brands, hiring foreign professionals with expertise in international markets and investing financial resources in acquisition of cutting-edge technology. These strategies, combined with the knowledge and learning that the firm acquired through its experiences along the course of its path to and in international markets, from its private label phase up to its current position, constitute a considerable competitive advantage for this firm (Prange & Verdier, 2011; Vahlne & Jonsson, 2017; Teece, 2017) which resulted in its international ambidexterity.

**Figure 2.** Diagram illustrating international ambidexterity at Alpha



#### 4.1.2 Beta

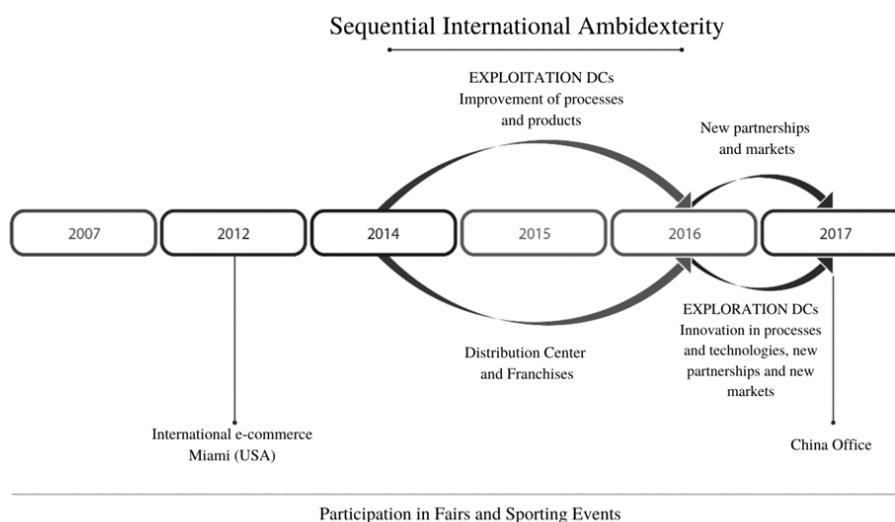
Beta is also a family-run firm, founded in 2007. It is known for differentiating its products by using distinctive colours and prints and their appeal “Fitness every day and everywhere”. Beta started manufacturing fitness clothing for its marketing director to compete in national and international bodybuilding championships. The firm launches five collections a year with 450 different items (SKUs) and sells to customers in all five of Brazil’s regions, via digital marketing, franchises, retail outlets and bulk contracts.

a) *Internationalization process*: Due to the achievements of the marketing director in the international championships, publicity in specialist social media boosted the brand in both domestic and foreign markets, particularly with posts linking the clothes and participation of athletes wearing Beta’s products in events. The firm produces an estimated 50 thousand items per month and sells its products via retail and wholesale outlets, e-commerce, franchises and distributors. In Brazil, the firm’s products are sold at approximately one thousand sales points including the firm’s own stores, multi-brand stores and showrooms. In the international market, Beta’s products are sold at approximately 200 multi-brand stores throughout all the continents. In 2014, faced with the dilemma of extending the brand’s international expansion without the financial resources to do so, the firm sought out partners. The partnership strategy focused on a new business model, based on alliances that included exchange of inventory on consignment for logistical support. After these changes, managers became aware of the

importance of international operations to achieve corporate goals. At that point, Beta had achieved active engagement in the international market but the firm still lacked planning and strategic alignment.

b) *Development of E&E capabilities*: After improvements in the productive and administrative processes required by the international market, exploitation capabilities were developed. The adaptation of products to suit different consumer profiles is also considered an exploitation capability. The firms’ development of such a diverse mix of products is the result of a collective effort, comprising of processes integrated between different sectors of the firm, Beta’s partnerships with its customers and its main international distributor. Additionally, in effort to develop its sales policies in the foreign market, Beta needed to innovate and reorganize its organizational structure, which constitutes development of exploration capabilities. Innovation appears to be associated to partnerships for the development of new products and to acquisition of new equipment. There is therefore alignment with the concept of sequential international ambidexterity, focusing on one strategy at a time, as described by Prange (2012). Direct sales through e-commerce and, later, strategic alliances enabled Beta to explore new markets and strengthen its brand through distributors and franchisees. Figure 3 illustrates the firm’s rapid development of both exploitation and exploration capabilities, although at different times, between 2014 and 2016, enabling it to attain international ambidexterity in two years.

**Figure 3.** Diagram illustrating international ambidexterity at Beta





Beta focused on one strategy at a time, this is enabled the firm to achieve both domestic and foreign growth, prioritising sequential international ambidexterity, which was important for rapid growth in the foreign market and was key to its expansion in the national market. As well as being a pivotal factor in attracting the interest of the third parties, that bought the firm in 2017. New investments were needed, mainly to implement consolidated strategies of absorption of the knowledge generated by internationalization but also for an internal restructuring to sustain the new group's long-term international expansion.

c) *Competitive advantage*: Beta's unique advantage is the result of a set of internal resources that have been built up over the course of its history, as result of its rapid adaptation to the international scenario. The demands of the international market prompted Beta to purchase machinery to enable it to carry out the entire production process in-house. The aesthetic characteristics of the firm's products, their quality and innovation are also important attributes that set it apart from the competition (Cietta, 2017). Its product design, embodying authenticity and channelling elements of its home country, such as rich colours, lifestyle and prints (Sutter et al., 2018) is another competitive advantage. The firm's distinctive designs add value to its products and constitute a unique selling point that can be leveraged (Simchi-Levi et al., 2009), enabling Beta to compete in the international market, charging the same prices as internationally traditional brands. Moreover, the firm's constant quest for novel technologies and processes, primarily acquired from China, has enabled it to improve its internal processes and explore new possibilities. This constant innovation secured the firm a competitive advantage over its competitors in terms of the efficiency of its processes and the success of its products (Ridder, 2012).

#### 4.1.3 Zeta

Zeta is a leading player in the beach fashion segment with 26 sales points in multi-brand stores in Brazil. The firm only operates with direct-to-customer sales, whether on a wholesale basis or via retail channels and is currently setting up an online sales platform.

a) *Internationalization process*: focussed on the beachwear sector, the firm's path to entering the foreign market has always been exclusively via

direct exports. Its products are marketed at national and international fairs, where it is represented by its customers. The majority of its customers are in South America and Central America and small footholds in North America, Europe and Asia. These customers sell Zeta's products in traditional stores and via e-commerce. After more than 30 years doing business in the domestic market, brand recognition is the main reason the firm continues to achieve good sales, despite its almost exclusive focus on the internal market. During the period studied, the firm did not take advantage of internal or external capabilities to effect changes or achieve organizational growth. The firm has identified internationalization as a way to expand its market, increase its customer base and most importantly to minimize the impact of the sector's seasonality. However, internationalization is treated as a secondary option by Zeta and it is not one of the firm's priorities. It only exports in response to occasional requests from foreign clients. Internationalization is not its organizational strategy.

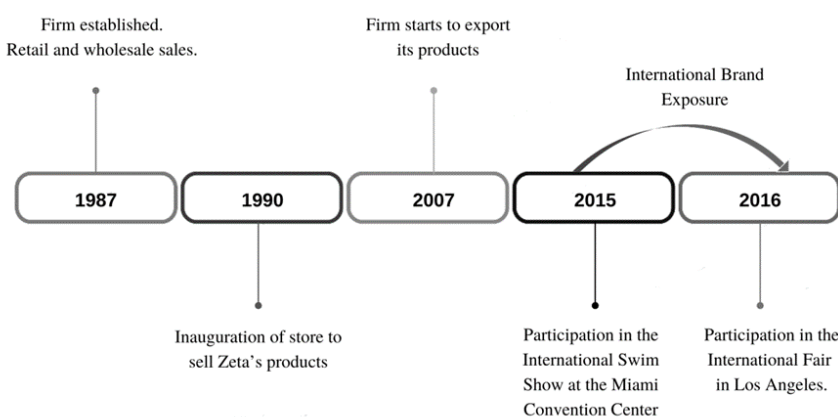
b) *Development of E&E capabilities*: The firm has sufficient production capacity to increase exports. However, insecurity, volatility of the market in the country of origin and a lack of knowledge about the bureaucratic aspects have hindered development of E&E capabilities. Capabilities that could help it to achieve competitive advantages over its competitors even in its domestic market. Zeta's involvement in the international market is limited to passive involvement in the form of direct exports and participation in international industry events. The international exhibitions stimulate innovation and the capacity for renewal through search and change routines, geographical and environmental stimuli and learning in the foreign market (Riviere & Suder, 2016). Studies in the area also point out that firms need to systematically update and renew their capabilities to stay ahead of their competitors, which is unlikely to happen when firms are passively positioned regarding internationalization (Lessard et al., 2013).

c) *Competitive advantage*: Zeta is in the beachwear business therefore, it has all the opportunity to take advantage of its home country's attributes, in this case Brazil, due to climate and geographical positioning. Home country attributes have been identified in theory, as a strategy for competitive differentiation in external markets

(Suter et al, 2018). However, analysing the firm's past collections, it may be concluded that its country of origin attributes were not exploited to the extent of constituting a competitive advantage. The firm invests to offer distinctive services that add value to the brand, making the act of consumption a significant emotional experience (Lazzeretti & Capone, 2015; Tonetto & Da Costa, 2011). This strategy has an indirect influence on

exports because it attracts local buyers who sell the firm's products abroad. The quality of the products and the firm's use of Brazilian accessories could contribute to the creation of a competitive advantage. Although, this advantage could easily be copied by a competitor and bring negative impacts to the firm and its products. Figure 4 illustrates Zeta's internationalization process.

**Figure 4.** Diagram illustrating Zeta's internationalization process



## 4.2 Analysis and discussion

The analyses of the single cases identified the E&E opportunities these firms created through use of internal and external factors (Luo & Bu, 2018) that could amplify the relationship between international commitment, international ambidexterity and competitive advantage as proposed by the conceptual model. If firms are to stand out against their global competitors in dynamic and complex markets (Vahlne & Jonsson, 2017) they need to develop and improve capabilities through learning processes and by managing the balance between internal and external resources (Luger et al., 2018; Luo & Bu, 2018). Specifically in relation to fashion industry firms from EMs, this study identifies the combination of internal and external resources (Table 4) considering the companies' creative capability and ability to adapt their products and services rapidly.

The ability to improve existing capabilities and develop new ones minimizes the liabilities of

outsidership and originality in the global market (Johnson & Vahlne, 2009; Li & Fleury, 2020; Luo & Rui, 2009). The international expansion processes of Alpha and Beta were a direct result of their business network relationships (Johanson & Matsson, 2015) of their decision-making processes (Eisenhardt & Martin, 2000) of the experiential knowledge gained along the course of the paths taken to get to their current positions and their experience in international markets (Johanson & Vahlne, 2003, 2009; Vahlne & Jonsson, 2017).

The cases studied clearly demonstrate that commitment to the international market enables fashion industry firms from emerging countries to develop E&E capabilities. This phenomenon occurred in the cases and is summarized in Table 5, showing that the two firms, which became involved with the international market, were able to absorb the knowledge accrued during these experiences using their internal and external resources (Li & Fleury, 2020). On the other hand, in the case of Zeta, the firm did not seek to increase its

international engagement nor develop dynamic capabilities.

**Table 4.** External and Internal Resources

Firm	Internal resources	External Resources
Alpha	Standardization of retail outlets +	Market leadership + International partnerships +
	Implementation of management processes	Location of retail outlets
	Private label +	Foreign employees + Acquisition of machinery
	Improvement of products to meet international standards	
	Creation of an international business department	
		International partnerships
Beta	Acquisition of machinery	Communications via social media + e-commerce
	Implementation of management processes +	International partnerships
	Acquisition of production systems +	
	Expansion of physical infrastructure	
	Adaptation of products +	Office in China
	Large product range	
	Marketing Strategies	
Zeta	Investment in higher quality raw materials	
	Brand Recognition	

Through the analysis of the information compiled, the study identified the E&E opportunities developed by companies along with indicators of the competitive advantages in relation to their competitors. It was noted in the cases of Alpha and Beta that international experience does in fact influence the scope of international ambidexterity (Vahlne & Jonsson, 2017; Hsu et al., 2013). Moreover, the development of products to meet the demands of international consumers and expanding the firms' engagement in the international market required them to not only develop new capabilities but also improve their existing ones.

Similarly, the balance between E&E capabilities is easier to achieve when managers recognize the importance of committing to global markets to achieve sustainable growth of the firm. Alpha's efforts were increasingly in this direction and Beta's actions were more rapid still. In contrast, at Zeta, no E&E capabilities were identified because of its passive engagement in the internationalization process. The managers did not perceive internationalization as a process that would offer opportunities to explore new markets and suppliers nor as a strategic option for growth when faced with fierce competition in the domestic market. The study findings in relation to Zeta, contribute to evidence confirming the results of previous studies that revealed that achieving international ambidexterity is linked to a more

intense international experience. The level of international engagement stimulates the creation of skills and competencies that are essential for achieving competitive advantages over competitors in global markets (Wu & Wu, 2016).

International commitment contributes to development of E&E capabilities because of firms' capacity to adapt to cross-cultural and dynamic environments (Cho & Jin, 2015; Zhou et al., 2016). This is in line with what was observed at the firms Alpha and Beta, which explored the opening of new markets, implemented incremental innovation through the acquisition of new machinery, created new forms of processes and reconfigured internal and external processes that generated brand visibility and increased competitiveness. In contrast, the study of Zeta helps to confirm that passive involvement in global markets may dismiss opportunities of contacting new suppliers, establishing strategic alliances (that could generate new business opportunities), developing new products and reconfiguring internal and external processes (that contribute to profitability, growth and visibility of the company). Therefore, it is proposed that:

*Proposition 1: The more diverse and greater the international commitment, the greater the development of exploration and exploitation capabilities by fashion industry firms in emerging markets, when combined with international ambidexterity.*

**Table 5.** Summary of the cases analysed

Firm	Internationalization Process	International Commitment	Exploration	Exploitation	Competitive Advantage
<b>Alpha</b>	1970: Exports to Paraguay, Venezuela, and Argentina 1980-2012: Exports via Private Label production for important fashion brands 2012: Italy – showroom (Milan) 2012: Panama Franchising 2014: The firm was acquired by a North-American private equity group. 2015: Italy – Mega Store (Milan) 2016: Franchising in 16 countries (Latin America (12); Sweden (1); Kazakhstan (1); Malaysia (1); Italy (1).	Exporting via direct sales, distribution, and franchises	New technologies; Innovation in processes and products; New alliances; Opening new markets.	Improvement of production and management processes; Training of human resources; Improvement of cut and fit and product quality.	Market leadership; Product quality comparable to that of their high-end fashion competitors, at lower prices, but still higher than the prices charged by all of their competitors in the domestic market; Standardization; Location of retail outlets.
<b>Beta</b>	2011: Exports to Latin America 2012: USA – Office in Miami 2012: Global e-commerce 2015: Spain – Strategic Alliance with Trading company for distribution in Europe 2015: New distributors in Russia and the Middle East 2015: Mexico – Franchising 2017: China – Office set up to seek out technology in equipment and production methods. 2018: Franchising in 5 countries (Colombia (2), Bolivia (1); Venezuela (2). 2018: Stores - Miami, Barcelona, Moscow, Bolivia, Mexico City, and Cali 2018: Exporting to more than 45 countries 2018: Firm was acquired by a Brazilian group	Exporting via direct sales, distribution, and franchises	New partnerships; Innovation in processes and products; Opening new markets.	Adaptation of products; Improvements of production and management processes.	Product design; large range of products; Communication strategies focused on social media and e-commerce.
<b>Zeta</b>	2007: Exporting to Latin America 2010: Exporting to Central America, North America, and Europe 2012: Exporting to Asia	Direct and indirect exports	—	—	Quality of products and raw materials; Regional brand recognition.

Thus, companies that want to increase their competitive advantage should not limit themselves to meeting external market demands but rather engage in internal restructuring. So that, changes may be learned by all and incorporated into the company's routines (Cuervo-Cazurra, 2012; Li & Fleury, 2020). If not the case, the firm will cease to be competitive as soon as its competitors develop the same capacity for exploration and exploitation (Jurkisiene & Pundziene, 2016; Li & Liu, 2014; Schilke, 2014). Absorption of knowledge through the paths and experience of the people who take part in the firm's internationalization process (Johanson & Vahlne, 2009) results in experiential learning (Vahlne & Jonsson, 2017) which will have impacts on exploration of internal and external opportunities in a dynamic and cyclical manner (Jurkisiene & Pundziene, 2016).

When international engagement is greater, as was seen at Alpha, the firm manages to develop simultaneous international ambidexterity. Whereas, in the case of Beta, simultaneous ambidexterity was not observed, which was attributed to conflicts caused by a lack of financial resources for investment (Wu & Wu, 2016). Therefore, exploration and exploitation capabilities were used at different times, making the process sequential. The Beta case demonstrates that strategic planning and a strong but not dependent, international network (Peng & Lin, 2019) facilitates the development of sequential international ambidexterity.

*Proposition 2: International commitment influences development of E&E capabilities when positively associated with simultaneous international ambidexterity, in fashion industry firms in emerging markets.*

This is accurate as can be seen in the case

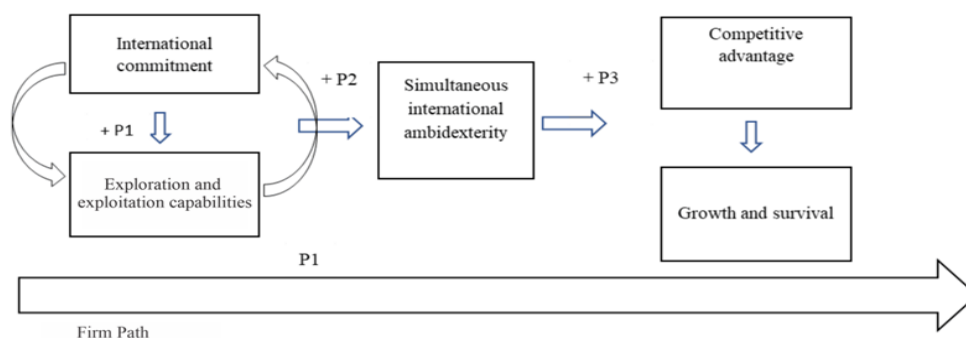
of Alpha, the firm was able to obtain a competitive advantage in relation to its competitors and also managed to grow in both domestic and foreign markets, attracting the attention of international investment groups. This is due to the simultaneous international ambidexterity achieved by the firm, which generated the competitive advantage and enabled it to grow and sustainably survive in the international market (Hsu et al., 2013; Prange & Verdier, 2011). These findings support proposition 3:

*Proposition 3: The greater the development of simultaneous international ambidexterity, the greater the engagement in international markets and the consequent consolidation of competitive advantages, leading to strengthening of existing capacities and the search for new competencies and survival in international markets.*

It has been observed that the strategic alliances not only had an impact on how Alpha and Beta entered the foreign market but also were significant elements in their growth. However, as a source of competitive advantage, strategic alliances may be temporary since they may generate dependence on external resources and vulnerability in the relationship network (Luo & Bu, 2018).

The analysis of these cases suggest that a firm's level of international engagement interferes with its achievement of international ambidexterity as the more engaged the firm is in the international market, the greater the challenges it faces consequently, the more capabilities and skills it will have to develop. Active engagement in the international market and ambidextrous combination of E&E capabilities result in simultaneous international ambidexterity, as suggested by the model presented in Figure 5, based on the research findings.

**Figure 5.** Proposed model



## 5 Conclusion

When companies from emerging countries go international, they have to deal simultaneously with the immediate struggle for survival. They need to develop resources and capabilities to reduce the competitive gap (between them and global competitors) and grow internationally. The prospect of ambidexterity may be of immense importance for these firms (Deng et al., 2018; Prange, 2012). Based on the cases analysed, it is possible to conclude that the balance between E&E capacities is easier to reach when managers recognize the importance of the commitment to global markets to achieve the company's sustainable growth.

The analysis of the international commitment of the firms investigated generated insights into the influence of a firm's path on its development of exploitation and exploration capabilities, ability to achieve international ambidexterity and capacity to generate competitive advantages to enable it to survive in international markets. This movement makes it possible for firms to absorb the knowledge generated from internal and external resources and intensify its international commitment (Hsu et al., 2013; Prange & Verdier, 2011). For firms from emerging markets, this offers the opportunity to differentiate themselves from firms from traditional markets (Deng et al., 2018). Therefore, concluding that the development of exploitation capabilities allied with exploration capabilities conjugated in an ambidextrous configuration, enables, via experiential learning development of key factors linked to quality and design of a large range of products. Besides, communication strategies, market leadership and location of retail outlets, which together constitute competitive advantages for the firms, investigated in relation to their competitors.

International ambidexterity is indeed necessary for firms to remain competitive in dynamic markets, like international markets, particularly in creative industries, such as the fashion industry in which the firms investigated in this study are part of. Firms in this industry are driven by a combination of creativity, intellectual capital and added value. These firms' performance is not merely linked to profitability but also to dimensions of value creation for their customers whether through the product or the brand, which

contributes to one firm achieving superior performance in relation to its competitors (Ito et al., 2012).

In the area of International Business, this study presents contributions that enable theoretical advancements within the scope of the participation of fashion industry firms from emerging economies in global markets, specifically with relation to dynamic E&E capabilities. Firstly, this study has shown that international commitment is linked to development of E&E capabilities when managed simultaneously. Secondly, it verifies that when simultaneous, international ambidexterity provides firms with competitive advantages, driving growth and survival in the international market.

Finally, it shows that simultaneous international ambidexterity enables fashion industry firms, especially those from EMs, to offset the disadvantage of liabilities of outsidership and origin caused by the uncertainties faced in their countries of origin, learning from the local environment and absorbing knowledge from their international networks (Cuervo-Cazurra, 2012; Johnson & Vahlne, 2009; Li & Fleury, 2020; Luo & Rui, 2009). The results provided by this study may be used to help business managers, mainly those in the fashion industry, to plan appropriate strategies for entry in global markets and to make decisions on allocation of resources, which will improve their competitiveness in these markets.

Simultaneous international ambidexterity gives a competitive advantage to firms, capable of using internal and external resources and combining them with the ability to form strategic partnerships that allow them to enter various markets and through more advanced modes of entry than exports. In this sense, fashion industry firms' capacity for flexibility and speed in development and adaptation of products and services is a factor in their favour compared to other industries.

### 5.1 Limitations and future research

It is proposed that the limitations of this research serve as insight for the follow future research:

- i. additional investigations with a larger number of companies using quantitative research methods;
- ii. studies analysing whether international ambidexterity significantly affects the company's performance, based on the

E&E capabilities identified in this study with more than one country and;

- iii. studies based on the results presented here to compare different sectors and to investigate which E&E factors may be standard in the fashion industry or specific to certain sectors.

The proposals formulated based on the conclusions of this study should contribute, in particular, to studies that investigate the fashion sector in developed countries. The comparison of E&E factors in emerging and developed markets may reveal new theoretical implications, including with respect to the mediating effect suggested by Proposition 1.

## 6 References

- Alänge, S., & Steiber, A. (2018). Three operational models for ambidexterity in large corporations. *Triple Helix*, 5(1), 1-25. <https://doi.org/10.1186/s40604-018-0053-9>
- Associação Brasileira da Indústria Têxtil e de Confecção. (2020). *Exportações Brasileiras de Produtos Têxteis e Confecionados*. Retrieved from <https://www.abit.org.br/uploads/arquivos/EXP%20SEG%20201812%20YTD.pdf>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 7(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: response to changes in the fashion industry. *The international review of retail, distribution, and consumer research*, 20(1), 165-173. <https://doi.org/10.1080/09593960903498300>
- Birkinshaw, J., Brannen, M. Y., & Tung, R. L. (2011). From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research. *Journal of International Business Studies*, 42, 573-581. <https://doi.org/10.1057/jibs.2011.19>
- Chang, Y., Hughes, M., & Hotho, S. (2011). Internal and external antecedents of SMEs' innovation ambidexterity outcomes. *Management Decision*, 49(10), 1658-1676. <https://doi.org/10.1108/00251741111183816>
- Cho, H. J., & Jin, B. (2015). What explains small- and medium-sized apparel retailers' international market involvement? An application of Uppsala model. *Fashion and Textiles*, 2(1), 21. <https://doi.org/10.1186/s40691-015-0045-6>
- Čiarnienė, R., & Vienažindienė, M. (2014). Management of contemporary fashion industry: characteristics and challenges. *Procedia-Social and Behavioral Sciences*, 156, 63-68. <https://doi.org/10.1016/j.sbspro.2014.11.120>
- Cietta, E. (2017). *A economia da moda*. Estação das Letras e Cores.
- Creswell, J. W. (2010). Projeto de pesquisa métodos qualitativo, quantitativo e misto. In *Projeto de pesquisa métodos qualitativo, quantitativo e misto*.
- Cuervo-Cazurra, A. (2012). Extending theory by analyzing developing country multinational companies: Solving the Goldilocks debate. *Global Strategy Journal*, 2(3), 153-167. <https://doi.org/10.1111/j.2042-5805.2012.01039.x>
- Cuervo-Cazurra, A., Ciravegna, L., Melgarejo, M., & Lopez, L. (2018). Home country uncertainty and the internationalization-performance relationship: Building an uncertainty management capability. *Journal of World Business*, 53(2), 209-221. <https://doi.org/10.1016/j.jwb.2017.11.002>
- Cuervo-Cazurra, A., & Ramamurti, R. (Eds.). (2014). *Understanding multinationals from emerging markets*. Cambridge University Press.
- Deng, P., Liu, Y., Gallagher, V. C., & Wu, X. (2018). International strategies of emerging market multinationals: A dynamic capabilities perspective. *Journal of Management & Organization*, 1-18. <https://doi.org/10.1017/jmo.2017.76>
- Duarte Alonso, A., & Kok, S. (2019). Dynamic capabilities in the context of Brexit and international wine business: An exploratory two-country study. *Thunderbird International Business Review*, 61(2), 277-290. <https://doi.org/10.1002/tie.22011>



Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, 14(4), 532-550.  
<https://doi.org/10.5465/amr.1989.4308385>

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25-32.  
<https://doi.org/10.5465/amj.2007.24160888>

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they?. *Strategic management journal*, 1105-1121.  
[https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)

Figueira-de-Lemos, F., Johanson, J., & Vahlne, J. E. (2011). Risk management in the internationalization process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2), 143-153.  
<https://doi.org/10.1016/j.jwb.2010.05.008>

Fletcher, M., & Harris, S. (2012). Knowledge acquisition for the internationalization of the smaller firm: Content and sources. *International Business Review*, 21(4), 631-647.  
<https://doi.org/10.1016/j.ibusrev.2011.07.008>

Floriani, D. E., Borini, F. M., & Fleury, M. T. L. (2009). O processo de internacionalização como elemento gerador de capacidades dinâmicas: o caso da WEG na Argentina e na China. *RBGN: Revista Brasileira de Gestão de Negócios*, 11(33), 367-382

Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of management Journal*, 47(2), 209-226.  
<https://doi.org/10.5465/20159573>

Helfat, C. E., & Peteraf, M. A. (2009). Understanding dynamic capabilities: progress along a developmental path. *Strategic Organization*, 7(1), 91-102.  
<https://doi.org/10.1177/1476127008100133>

Hsu, C. W., Lien, Y. C., & Chen, H. (2013). International ambidexterity and firm performance in small emerging economies. *Journal of World Business*, 48(1), 58-67.

<https://doi.org/10.1016/j.jwb.2012.06.007>

Ito, N. C., Hayashi Junior, P., Gimenez, F. A. P., & Fensterseifer, J. E. (2012). Valor e vantagem competitiva: buscando definições, relações e repercussões. *Revista de Administração Contemporânea RAC*, 16(2), 290-307.  
<http://dx.doi.org/10.1590/S1415-6552012000200008>

Johanson, J., & Mattsson, L. G. (2015). Internationalisation in industrial systems—a network approach. In *Knowledge, Networks and Power* (pp. 111-132). Palgrave Macmillan, London.

Johanson, J., & Vahlne, J. E. (2003). Business relationship learning and commitment in the internationalization process. *Journal of international entrepreneurship*, 1(1), 83-101.  
<https://doi.org/10.1023/A:1023219207042>

Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. *Journal of international business studies*, 40(9), 1411-1431.  
<https://doi.org/10.1057/jibs.2009.24>

Jurksiene, L., & Pundziene, A. (2016). The relationship between dynamic capabilities and firm competitive advantage: The mediating role of organizational ambidexterity. *European Business Review*, 28(4), 431-448.  
<https://doi.org/10.1108/EBR-09-2015-0088>

Lazzeretti, L., & Capone, F. (2015). Museums as societal engines for urban renewal. The event strategy of the museum of natural history in Florence. *European Planning Studies*, 23(8), 1548-1567.  
<https://doi.org/10.1080/09654313.2013.819073>

Lessard, D. R., Lucea, R., & Vives, L. (2013). *Building your company's capabilities through global expansion*. New York: MIT.

Li, D. Y., & Liu, J. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. *Journal of Business Research*, 67(1), 2793-2799.  
<https://doi.org/10.1016/j.jbusres.2012.08.007>



- Li, J., & Fleury, M. T. L. (2020). Overcoming the liability of outsidership for emerging market MNEs: A capability-building perspective. *Journal of International Business Studies*, 51(1), 23-37. <https://doi.org/10.1057/s41267-019-00291-z>
- Lin, S., & Si, S. (2019). The influence of exploration and exploitation on born globals' speed of internationalization. *Management Decision*, 57(1), 193-210. <https://doi.org/10.1108/MD-08-2017-0735>
- Luger, J., Raisch, S., & Schimmer, M. (2018). Dynamic Balancing of Exploration and Exploitation: The Contingent Benefits of Ambidexterity. *Organization Science*, 29(3), 449-470. <https://doi.org/10.1287/orsc.2017.1189>
- Luo, Y. (2002). Contract, cooperation, and performance in international joint ventures. *Strategic management journal*, 23(10), 903-919. <https://doi.org/10.1002/smj.261>
- Luo, Y., & Bu, J. (2018). Contextualizing international strategy by emerging market firms: A composition-based approach. *Journal of World Business*, 53(3), 337-355. <https://doi.org/10.1016/j.jwb.2017.01.007>
- Luo, Y., & Rui, H. (2009). An ambidexterity perspective toward multinational enterprises from emerging economies. *Academy of Management Perspectives*, 23(4), 49-70. <https://doi.org/10.5465/amp.23.4.49>
- Lyu, J., Hahn, K., & Sadachar, A. (2018). Understanding millennial consumer's adoption of 3D printed fashion products by exploring personal values and innovativeness. *Fashion and Textiles*, 5(1), 11. <https://doi.org/10.1186/s40691-017-0119-8>
- Ma, J., & Hu, Y. (2017). Analysed with Shanghai international fashion the development of creative industry. *Journal of Arts and Humanities*, 6(5), 66-69. <http://dx.doi.org/10.18533/journal.v6i5.1169>
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization science*, 2(1), 71-87. <https://doi.org/10.1287/orsc.2.1.71>
- Ojala, A., Evers, N., & Rialp, A. (2018). Extending the international new venture phenomenon to digital platform providers: A longitudinal case study. *Journal of World Business*, 53(5), 725-739. <https://doi.org/10.1016/j.jwb.2018.05.001>
- O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of management Perspectives*, 27(4), 324-338. <https://doi.org/10.5465/amp.2013.0025>
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Sage Publications.
- Peng, M. Y. P., & Lin, K. H. (2019). International networking in dynamic internationalization capability: the moderating role of absorptive capacity. *Total Quality Management & Business Excellence*, 1-20. <https://doi.org/10.1080/14783363.2019.1661239>
- Pereira, V., Mellahi, K., Temouri, Y., Patnaik, S. & Roohanifar, M. (2019), Investigating dynamic capabilities, agility and knowledge management within EMNEs-longitudinal evidence from Europe. *Journal of Knowledge Management*, Vol. 23 No. 9, pp. 1708-1728. <https://doi.org/10.1108/JKM-06-2018-0391>
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. *Managerial and decision economics*, 24(4), 309-323. <https://doi.org/10.1002/mde.1126>
- Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization science*, 1(3), 267-292. <https://doi.org/10.1287/orsc.1.3.267>
- Prange, C. (2012). Ambidextrous internationalization strategies: The case of Chinese firms entering the world market. *Organizational Dynamics*, 41(3), 245-253.
- Prange, C., & Verdier, S. (2011). Dynamic capabilities, internationalization processes and performance. *Journal of World Business*, 46(1), 126-133. <https://doi.org/10.1016/j.jwb.2010.05.024>
- Ridder, A. K. (2012). External dynamic capabilities: creating competitive advantage in innovation via external resource renewal. *Academy*

*Management Proceeding*, 1-48.

Riviere, M., & Suder, G. (2016). Perspectives on strategic internationalization: Developing capabilities for renewal. *International Business Review*, 25(4), 847-858. <https://doi.org/10.1016/j.ibusrev.2015.10.004>

Rybalowski, T. M. (2008). Detalhes tão pequenos. In: Feghali, M., & Schmid, E. (orgs.). *O Ciclo da Moda*. 1 ed. Rio de Janeiro: Senac Rio.

Schilke, O. (2014). On the contingent value of dynamic capabilities for competitive advantage: The nonlinear moderating effect of environmental dynamism. *Strategic Management Journal*, 35(2), 179-203. <https://doi.org/10.1002/smj.2099>

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2009). *Cadeia de suprimentos projeto e gestão: conceitos, estratégias e estudos de caso*. Bookman Editora.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350. <https://doi.org/10.1002/smj.640>

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *The Academy of Management Perspectives*, 28(4), 328-352. <https://doi.org/10.5465/amp.2013.0116>

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)

Tonetto, L. M., & Xavier da Costa, F. C. (2011). Design Emocional: conceitos, abordagens e perspectivas de pesquisa. *Strategic Design Research Journal*, 4(3), 132-140. <https://doi.org/10.4013/sdrj.2011.43.04>

Tsai, H. T., & Ren, S. (2019). Antecedents of strategic ambidexterity in the context of internationalisation: a panel study of Taiwan Small and median-sized enterprises. *Technology Analysis & Strategic Management*, 1-16.

<https://doi.org/10.1080/09537325.2019.1582764>

Vahlne, J. E., & Jonsson, A. (2017). Ambidexterity as a dynamic capability in the globalization of the multinational business enterprise (MBE): Case studies of AB Volvo and IKEA. *International Business Review*, 26(1), 57-70. <https://doi.org/10.1016/j.ibusrev.2016.05.006>

Wang, C. L., & Ahmed, P. K. (2007). Dynamic Capabilities: A Review and Research Agenda. *International Journal of Management Reviews*, 9(1), 31-51. <https://doi.org/10.1111/j.1468-2370.2007.00201.x>

Wang, Y. S. (2016). Dynamic capabilities in fashion apparel industry: emergent conceptual framework. *Baltic Journal of Management*, 11(3)286-309. <https://doi.org/10.1108/BJM-02-2015-0051>

Wu, Y., & Wu, S. (2016). Managing ambidexterity in creative industries: A survey. *Journal of Business Research*, 69(7), 2388-2396. <https://doi.org/10.1016/j.jbusres.2015.10.008>

Yin, R. K. (1994). *Case study research: design and methods*. Sage Publications.

Zhou, Y., Lu, L., & Chang, X. (2016). Averting risk or embracing opportunity? Exploring the impact of ambidextrous capabilities on innovation of Chinese firms in internationalization. *Cross-Cultural & Strategic Management*, 23(4), 569-589. <https://doi.org/10.1108/CCSM-07-2014-0085>

**Appendix.** Summary of findings of analyses of the cases investigated

Firm	Reasons for Internationalization and Entry Mode	Exploitation Capabilities	Exploration Capabilities	International Ambidexterity	Competitive Advantage, Key Factors
Alpha	<p><u>Exporting via direct sales; distributors, and franchises.</u></p> <p><i>“The main reasons why the firm decided to internationalise were to reduce physical distances, reduce costs in certain markets, benefit from economies of scale and take advantage of the firm’s image” <b>I4</b>.</i></p> <p><i>“[...] at the time we were producing private label goods for export, which were international products: we were producing for Dockers, some items for Armani, for Zara, for Latin American countries, Chile, Argentina, other European countries” <b>I2</b></i></p> <p><i>“When we started our European operation, the idea was to sell to multi-brand stores or department stores like Macy’s, Bloomingdale’s, because it’s low risk” (<b>I4</b>).</i></p>	<p><u>Improvements in production and management processes:</u></p> <p><i>“[...] here at Alpha, the biggest problem was the internal process. Nowadays, the internal processes for internationalization are very well rounded. With my team, you just have to leave it in their hands and before you know it they’ll be dealing with the drawback process, they’ll be talking to imports and dealing with it. Back to Back, licensing of certain products.” <b>I1</b></i></p> <p><u>Training of personnel</u></p> <p><i>“We invested in people. People from the technical side of the firm went to Europe, took courses, learnt, went into factories. This gave the firm a very strong foundation, so when the company internationalised its own brand, it had products that were already up to international standards. That’s how we improved our internal</i></p>	<p><u>Acquisition of machinery</u></p> <p><i>“There were major investments in machinery [...] Nowadays our industrial plant is among the best in Latin America” <b>I2</b></i></p> <p><u>New alliances:</u></p> <p><i>“[...] together with our partner who is our supplier of neckties, he supplies ties to more than 70 countries, and we have a very strong relationship founded on friendship [...] So we said that he would sell to us in our shop in Milan” <b>I1</b></i></p> <p><i>“[...] our partner was a franchisee for Hugo boss, is a franchisee of Lacoste and Tommy, and he absolutely loves Alpha, so he also came in on the operation in Milan” <b>I1</b></i></p> <p><u>New markets</u></p>	<p>Simultaneous international ambidexterity initially, followed by Sequential international ambidexterity later</p>	<p><u>Market leadership:</u></p> <p><i>[...] so we thought, that if the firm is expanding on the domestic market through retail sales, why not replicate the strategy abroad? That will give us greater control and position the brand. Basically, there are a string of benefits over exporting to multi-brand stores” <b>I1</b></i></p> <p><i>“[...] but because of the relevance of international business to Alpha, it made a great difference to join them together and create a New Business department, which [...] we now call International Expansion” <b>I3</b></i></p> <p><u>Product quality comparable to that of their Italian high-end competitors, at lower prices, but still higher than the prices charged by all of their competitors in the domestic market:</u></p> <p><i>“[...]we are the only tailored shirt manufacturer in Latin America with high revenue</i></p>

	<p><i>“So I’d say that internationalization was essential for what the firm is today [...] before it became an international brand, it had to become an international firm” <b>I2</b></i></p> <p><i>“[...]the firm has to keep the operation in developed markets in its own hands, it has to retain control, then, one, two or three operations in developed markets will make a great contribution to leverage the less developed markets” <b>I1</b></i></p> <p><i>“[...] so we thought, that if the firm is expanding on the domestic market through retail sales, why not replicate the strategy abroad? That will give us greater control and position the brand. Basically there are a string of benefits over exporting to multi-brand stores” <b>I1</b></i></p> <p><i>“[...]the largest firm in the fashion segment in Brazil, with the largest number of franchises abroad” <b>I1</b></i></p> <p><i>"When I moved into the international department, we already had customers in Bolivia, Paraguay, and Uruguay buying from us,</i></p>	<p><i>processes” <b>I2</b></i></p> <p><u>Improvements in cut and fit</u></p> <p><i>“Some time ago, the firm hired a Spanish expert who has a tailoring school in Spain. He had worked for Spanish textile manufacturers, in industrial factories, but he’s a master tailor too, and he stayed here with us for years, working to set up the industrial side, technology, communications between departments, the details of cut; he brought a great deal of know-how with him, so the firm has always been investing in this” <b>I2</b></i></p> <p><u>and product quality:</u></p> <p><i>“So the firm was obliged to improve its production to meet international quality standards, European and United States standards, for example the collar didn’t meet the European standard, so technicians from Zara or some other company came over and said that the tip of the collar didn’t fit the international standard, you need such and such a machine and a certain finish for a perfect international standard collar ..... So those</i></p>	<p><i>“[...] the company’s showroom in Milan, in Italy, was a turning point in our enterprise on the international market” <b>I1</b></i></p> <p><i>“The shop in Kazakhstan has an interesting story behind it. I met this partner in our Milan showroom. He has several high-end multi-brand stores [...] We spent three years negotiating to open this shop” <b>I1</b></i></p> <p><i>“We already had the idea for the United States project in mind. Alpha’s entry there facilitated and optimized the process, so we could take advantage of our existing customers and launch the other brands we had as a portfolio” <b>I3</b></i></p> <p><i>"[...] Americans buy a little at a time, and they work in stages, they’ll buy 10 thousand units, a while later they’ll buy 30, then the next order will be for 100, and if you have the capacity it’s an unbelievable market " <b>I3</b></i></p>		<p><i>and high quality” <b>I1</b></i></p> <p><i>“[...]from early on, the firm was obliged to meet international quality standards”</i></p> <p><i>“[...]these international standards transformed the company into the leader in quality that it is today” <b>I2</b></i></p> <p><i>“[...]we buy cotton from Peru, which is cotton that has longer fibres, it’s the best cotton in the world” (I4),</i></p> <p><i>“[...] like with cloth, we invest in Italian and European cloth and our pure silk comes from China” <b>I2</b></i></p> <p><u>Standardization</u></p> <p><i>“In Panama, the storefront there is made from steel. When I arrived for the opening, it was white and there wasn’t time to change it. So we opened, but we didn’t announce it in the press until we had changed the storefront [...] so what we try and do is take Brazilianness abroad. If you go into an Alpha store abroad, they will be playing Bossa Nova music, there will be banana sweets and very often there will be a buffet that we set up with cheese bread, inside the store. We take</i></p>
--	--	---	---	--	---

	<p>who contacted us [...] who had multi-brand stores abroad and wanted to sell the brands in their countries” <b>I4</b></p>	<p>standards adopted back then were already transforming the firm into what it is today” <b>I2</b></p>			<p>Brazil with a Z and another characteristic is to display the names of the countries where our brand is sold, so that customers realise that we are an international brand” <b>I1</b></p> <p><u>and location of retail outlets.</u></p> <p>“[...]we put our shops in places where large numbers of people pass through, such as in São Paulo International airport - Guarulhos” <b>I1</b></p> <p>“[...]display the names of the countries where our brand is sold, so that customers realise that we are an international brand” <b>I1</b></p>
Beta	<p><u>Exporting via direct sales, distribution, and franchises</u></p> <p>“[...]the first distributor I used to sell to was a distributor from the Middle East, a person who bought to then sell to other shops” <b>I6</b></p> <p>“The shop in Mexico is a franchise, so it follows our standards, all of the franchises have to follow the standards” <b>I6</b></p> <p>“So I signed my first distributor, a guy who soon after I came into the firm he came in too, and started to sell for us in Europe,</p>	<p><u>Adaptation of products:</u></p> <p>“[...]so you have to start to adapt your products for that market, that’s the first condition, it’s like it’s the tip of the internal changes in the internationalization process, when you actually adapt your products for that specific market” <b>I5</b></p> <p>“[...]it’s a challenge, because you serve many regions, many different tastes, many different customers, it’s very complicated, it’s a huge challenge, now we’re changing shape to fit this better. Because, for</p>	<p><u>New partnerships:</u></p> <p>“[...] country management, so, I would sell to HQ, which would sell to what we call country management (CM), this CM might do business in one or more countries, for example, the CM for Germany covers the markets in Germany, Switzerland, and Austria, etc.” <b>I6</b></p> <p>“Today I would say we have a presence in 40 to 50 countries worldwide, countries where you will find someone who is selling the brand” <b>I5</b></p>	<p>Sequential International Ambidexterity</p>	<p><u>Product design:</u></p> <p>“[...]if you have a product that is innovative in terms of design or quality or communications, that’s what’s going to make internationalization possible” <b>I6</b></p> <p><u>Large range of products:</u></p> <p>“We generally have 450 SKUs - counting jeans and everything. We do five collections a year” <b>I7</b></p> <p><u>Communication strategies focused on social media and e-commerce:</u></p>



	<p>only he was Trade. So he bought here in Brazil and sold there, so I didn't know what it was like there" <b>I6</b></p> <p>"The firm started when the social media platforms were starting to appear, I've used social media since the time of Orkut, fotolog, etc, I started selling clothes on Orkut" <b>I1</b>.</p> <p>"[...]the company's managers went to Miami to do an editorial, a campaign, and decided to open a business there. They opened an office, hired someone to work there, formatted a website and built an e-commerce platform" (<b>I2</b>).</p>	<p>example, the customer in Germany isn't the same as the customer in Barcelona, who isn't the same customer as in Russia, who isn't the same as in Colombia and, whether you like it or not, we focus on different things" <b>I7</b></p> <p><u>Improvement of production and management processes</u></p> <p>"So I started to do everything correctly, I recorded all of my processes within the firm; what I needed was dependent on other factors, so I would go to the invoicing department, man when you export, I need the goods to be packaged like this, I need the paperwork you send me to be like that, so I can produce an acceptable invoice" <b>I6</b></p> <p>"I had to change a lot in the company, there wasn't even a decent ERP system in the firm, it was a huge change to the structure, to Human Capital, knowledge, infrastructure, better conditions" <b>I6</b></p> <p>"It was a huge change over the last two and a half years, in structure, in capital in general, in Human Capital,</p>	<p><u>Innovation in processes and products:</u></p> <p>"Right now, I've got a team in China, being trained, absorbing information on machinery that we bought, so they can come back here and operate it" <b>I5</b></p> <p>"[...]if you have a product that is innovative in terms of design or quality or communications, that's what's going to make internationalization possible" <b>I6</b></p> <p>"we are always investing in cutting-edge technology - all bought with our own resources" <b>I5</b></p> <p><u>Opening new markets.</u></p> <p>"[...] we have an office in China that was opened this week, in a development pole that has several suppliers nearby [...]they specialise in accessories and trims" <b>I5</b></p> <p>"[...]there's an office in China that was opened this week, in a development pole that has several suppliers nearby" <b>I7</b></p> <p>"[...]in November 2014, there was already demand, with people, firms, players in</p>		<p>"we are very strong in e-commerce. Currently, at least 20 percent of what we sell is via domestic e-commerce, without counting the international side" <b>I6</b></p> <p>"[...]we are always exchanging information with the distributors about marketing activities" <b>I8</b></p> <p>"This is one of the main reasons for our success, the design and the marketing involving social networks and the element of engagement with the public" <b>I5</b></p> <p>"[...]there are a number of different strategies for each country, but we are globalizing our strategies, so now we are implementing those strategies in the internal market" <b>I8</b></p> <p>"[...]our brand has good recognition in terms of product value, we have taken part in some events here, distributors run the events over there themselves, we give some of them permission to do that, the main office invested in a large event there last year, recently at the end of last year. It's all written into the contract, that they have to invest a certain amount in marketing." <b>I5</b></p>
--	--	--	---	--	---

		knowledge, physical setup, infrastructure, better conditions” <b>I6</b>	general, who wanted to work with our brand in the regions where they live [...] So we segmented with country managements, each country management has the potential of a distributor, none of them are a European distributor, each of them is stronger in a given region and each one had a network of shops and shopkeepers, had one shop, two shops, three shops selling to the final customer” <b>I6</b>		“Our differentiating factor is the combination of marketing strategies targeting social media and e-commerce together with the publicity generated by athletes at competitions and engagement with the public” <b>I5</b>
Zeta	<u>Direct and indirect exports</u>  “[...] we took part in two trade fairs, one in Florida and another in Las Vegas but we didn’t see many results from that. Perhaps it wasn’t a very well defined strategy” <b>I9</b>  “[...] our internal sales end up being direct sales, the same as on the international market, and sales end up being passive” <b>I9</b>  “There are some customers in South America, Central America, North America, Europe, and Asia, it’s not a very significant volume, it accounts for about 3% of company revenue” <b>I9</b>	---	---	---	<u>Quality of products and raw materials.</u>  “The fabrics come with a sun protection factor and some of the fabrics go through an industrial washing process, which is a unique selling point for the collection” <b>I10</b>  <u>Regional brand recognition.</u>  “[...]there’s the fact that the brand is recognised regionally, which is a factor that makes a big difference, and so we think our demand is because the brand is very well known in the south of the country, primarily in SC, followed by PR and RS” <b>I10</b>

	<i>“But we do see exporting as an excellent opportunity to expand our markets and to deal with seasonality”</i> <i><b>19</b></i>				
--	---	--	--	--	--



## Corporate governance in state-owned companies: effects on performance

Thiago Nery da Cunha<sup>1</sup>, Rosilene Marcon<sup>2</sup>, Jaison Caetano da Silva<sup>3</sup>, Cinara Gambirage<sup>4</sup>

<sup>1</sup> Universidade do Vale do Itajaí (UNIVALI) - thiagoneryadm@hotmail.com

<sup>2</sup> Universidade do Vale do Itajaí (UNIVALI) - rmarcon@univali.br

<sup>3</sup> Fundação Getulio Vargas (FGV/ EBAPE) - jaison.silva@fgv.edu.br

<sup>4</sup> Fundação Getulio Vargas (FGV/ EBAPE) - cinara.gambirage@fgv.edu.br

### KEYWORDS

Corporate governance,  
State-owned companies,  
Economic and financial  
performance.

Received 12.02.2021

Reviewed 26.02.2021

Accepted 01.03.2021

ISSN 1980-4431

Double blind review



### ABSTRACT

Based on agency theory, this article analyzes the adoption and the strengthening of corporate governance and their resulting on performance of state-owned companies. Therefore, it was employed as empirical context the Brazilian state-owned companies that, by force of law, adopted and started to monitor corporate governance mechanisms. Thus, a longitudinal approach was adopted, between 2013 and 2019, and a panel data model for the analysis of all Brazilian and federal state companies directly controlled by the Union, dependent and not dependent from federal government. To our analysis, we employed and original database with longitudinal information at firm level. The main results suggest that the adoption and the strengthening of corporate governance mechanisms by state-owned companies can positively influence economic and financial performance and reduce their financial dependence from the government. However, considering the characteristics of public administration, we argue that this effect can be delayed in state-owned companies. This study contributes to the literature in several ways. The study sheds light on the understood aspects of the theme and includes in the discussion the delayed aspect of the effect from corporate governance on state-owned companies. Moreover, the paper also supports managers and formulators of public politics.

### PALAVRAS-CHAVE

Governança corporativa,  
Empresa estatal,  
Desempenho econômico-  
financeiro.

### RESUMO

Fundamentado na teoria da agência, este artigo analisa a adoção e o fortalecimento da governança corporativa e seus resultantes no desempenho de empresas estatais. Para tanto, utilizou-se como contexto empírico as empresas estatais brasileiras que, por força de lei, adotaram e passaram a acompanhar os mecanismos de governança corporativa. Assim, adotou-se uma abordagem longitudinal, entre 2013 e 2019, e um modelo de dados em painel para a análise de todas as empresas estatais federais brasileiras de controle direto da União, dependentes e não dependentes do governo federal. Para nossa análises, utilizamos base de dados original com informações longitudinais e ao nível de empresa. Os principais resultados sugerem que a adoção e o fortalecimento dos mecanismos de governança corporativa pelas estatais podem influenciar positivamente o desempenho econômico-financeiro e reduzir as suas dependências financeiras do governo. Entretanto, considerando as características da administração pública, argumentamos que esse efeito pode ser retardatário em empresas estatais. Esse estudo contribui de diversas maneiras. O estudo lança luz a aspectos subentendidos da temática e incorpora à discussão o aspecto retardatário do efeito da governança corporativa nas empresas estatais. Além disso, fornece subsídios para os gestores e formuladores de políticas públicas.

## 1 Introduction

After Second World War, state-owned companies became essentials to the public power to contribute with the social and economic development of countries that these companies belong, occupying relevant places as different instruments of intervention in economics, social and politics field (Fontes Filho, 2018). However, stages of corruptions, political interference, inefficiencies and losses involving state-owned companies become common at News, bringing lack of mechanisms of corporate governance in public management environment, mainly in emerging markets (Pinho, 2017; Maximiano, 2017).

However, the adoption and the strengthening of corporate governance and their resulting on performance of state-owned companies has showed paradoxical and little understood in the literature (Sanad & Al-Sartawi, 2016; Anup & Cooper, 2017). This phenomenon has challenged researchers from the thematic, because the literature presents several inconclusive aspects related to the corporate governance in state-owned companies, as for example if the adoption and the strengthening of corporate governance promote improvement in performance from companies connected to the public management similarly to the private companies (Grosman, Okhmatovskiy & Wright, 2016; Daiser, Ysa & Schmitt, 2017, Whincop, 2017, Fortini & Shermam, 2017; Coletta & Lima, 2020), considering the specificities of governance directed to companies under public management as well as low performance from institutions in emerging markets (Peng *et al.*, 2016; Whincop, 2017).

Mostly, studies seek to understand the corporate governance in organizational environments under the private management (Detthamrong *et al.*, 2017; Laksmi & Kamila, 2018; Aguilera, Judce & Terjesen, 2018). Moreover, investigations of corporate governance in state-owned companies exclude from their analysis state-owned companies that are dependent from the government. These studies select a sample of state-owned companies non-dependent of the capital from

private propriety, becoming still more limited the knowledge of state-owned companies (Subramanian, 2015; Khongmalai & Distanont, 2017; Shawtari, *et al.*, 2017; Mbo & Adjasi, 2017; Lazzarini & Musacchio, 2018; Coletta & Lima, 2020).

Based on agency theory, this study contributes with the thematic investigating the adoption and the strengthening of corporate governance in state-owned companies and their resulting on performance (Organisation for Economic Co-operation and Development, 2015; Lazzarini & Musacchio, 2018; Fontes Filho, 2018; Daiser & Ysa; Schmitt, 2017; Fontes Filho & Alves, 2018; Lazzarini & Musacchio, 2018; Coletta & Lima, 2020). To achieve this objective, we used as empirical context Brazilian state-owned companies that, by force of law, adopted and started to monitor corporate governance mechanisms. Thus, a longitudinal approach was adopted, between 2013 and 2019, and a panel data model for the analysis of all Brazilian and federal state companies directly controlled by the federal government, dependent and non-dependent from government. Data were obtained from several sources as *Ministério da Economia, da Secretaria de Coordenação e Governança das Empresas Estatais (SEST)*, and documents registered about this theme on government platforms of public transparency.

To test our theorization, we employed an original database with longitudinal information at firm level. The main results suggest a positive relationship between the strengthening of corporate governance mechanisms and economic and financial performance in state-owned companies. Moreover, the results also suggest a negative relationship between the strengthening of corporate governance mechanisms in dependent state-owned companies and the level of financial dependence from the government of this group of companies. In sum, the results consistently indicate that the adoption and the strengthening of corporate governance mechanisms by state-owned companies can positively influence economic and financial performance and reduce their financial dependence from the government. However, these results do not

present a relation with statistical significance lower than the traditional 5%. Then, it is not possible to accept the hypotheses proposed.

A possible explanation for this can be the feature of slowness from state-owned companies, such slowness could impact in adoption and implementation of aspects related to corporate governance resulting from Law number 13.303/2016. Therefore, the effect of the adoption and the strengthening of corporate governance mechanisms by state-owned companies can be latecomers. Allied to the slowness, sometimes the seek for a better economic and financial performance share space with the mission in attending to the public politics, promoting the social, economic and politics development from the context that these companies are inserted.

This study contributes to the literature in several ways. The study sheds light on the understood aspects of the theme and includes in the discussion the delayed aspect of the effect from corporate governance on state-owned companies. In managerial aspects, this study supports managers to make decisions based on the effectiveness from the corporate governance of state-owned companies. Moreover, the paper also supports formulators of public politics and regulated institutions from these companies.

The study is organized in five parts, including this introduction. On second section we present the theoretical contextualization. Next, we bring the method employed to conduct the study. Fourth, we developed the presentation and analysis of the results and finally we bring the final remarks.

## 2 Literature review and hypotheses

Corporate governance can be understood as several mechanisms of control that when they are put in practical in the organizations, they have the objective to decrease agency problems occurred by agent actions in his interest and not by company's interest (Jensen & Meckling, 1976; Eisenhardt, 1989; Chang *et al.*, 2015; Altounian, Sousa & Lapa, 2017; Al-Sartawi, 2018). Then, corporate governance can be understood as a toll used to manage and

control an institution (Rughoobur, 2018; Silva, Santos, Almeida, 2012). This governance is an essential factor to maintain the company with transparency relationship, ethic and productive among the stakeholders, shareholders and agents (Aguilera *et al.*, 2015; Laksmi & Kamila, 2018).

The effective practice of corporate governance brings the insertion of its internal and external mechanisms (Aguilera *et al.*, 2015, Bueno *et al.*, 2018). Internal mechanisms of corporate governance are considered the board of directors and the structure of shareholding (Aguilera *et al.*, 2015). Regarding the external mechanisms, Aguilera *et al.*, (2015) point the following relation: legal system, market for corporate control, external audit, agencies of rating, activism of stakeholders and media. Moreover, though its mechanisms, corporate governance is recognized as an important tool for that companies can achieve the maximum efficiency, sustainability, productivity, and profitability. In other words, for that companies can achieve the best economic-financial performance (Sanad, Al-Sartawi & Abdalmuttaleb, 2016; Anup & Cooper, 2017).

The literature points studies related to this perspective. Scholars as Shehata (2016); Hermasi (2017); Detthamrong *et al.* (2017); Laksmi and Kamila (2018) and Aguilera, Judge and Terjesen (2018) correlated their investigations to the topic of corporate governance and its resulting in economic-financial performance of companies from several countries. Giving this, we can note that studies about the theme of corporate governance has belonging to a scenario studied from researchers and organizations of several parts of the world with the objective to bring new perspectives about how corporate governance behaves and its resulting in different types of economies and companies (Pagnussat *et al.*, 2019).

The debate about corporate governance and its practices on business management had a favorable impact on discussions about corporate governance applied to the governmental context (Marcon & Souza, 2007; Oliveira & Pisa, 2015; Wincop, 2017;

Grosman, Okhmatovskiy & Wright, 2016). Corporate governance applied in companies with public management even that present concepts and common objectives when they are compared to companies with private management, these public companies have an additional proposal because besides the attention to legal issues, boards, accounting, transparency, and economic-financial, they need to achieve the objectives from public politics which are emerged (Organisation for Economic Co-operation and Development, 2015; Peng *et al.*, 2016; Wincop, 2017).

Corporate governance in state-owned companies is more complex in comparison to private companies (Peng *et al.*, 2016; Whincop, 2017), given that the main objective of corporate governance in private companies is in resolving problematics from shareholder interests with the administrators interests. On the other hand, on state-owned companies, the corporate governance face at least three different issues: (1) governors and politicians can make decisions in benefit to public interest that are harmful for state-owned companies results (2) the government has the opportunity to develop role of client, credit offer, shareholder and regulator; (3) and the governors use state-owned companies with the objective to obtain more support from politicians of specific groups of interest (Whincop, 2017).

Although the discussions and debates about the theme of corporate governance in companies assume the hypothesis that the adoption of best practices of corporate governance can positively impact on economic-financial performance from companies through the best decisions as well as more adequate controls and minimize the cost of capital (Chang *et al.*, 2015; Musacchio, Lazzarini & Aguilera, 2015; Sanad, Al-sartawi & Abdalmuttaleb, 2016; Anup & Cooper, 2017; Laksmi & Kamila, 2018; Rughoobur, 2018; Ferreira *et al.*, 2019), still is not clear how corporate governance affects state-owned companies performance (Daiser, Ysa & Schmitt, 2017; Whincop, 2017; Grosman, Okhmatovskiy & Wright, 2016; Fortini & Shermam, 2017; Coletta & Lima, 2020; Cunha,

Freitas & Araújo, 2020).

On international context, 52,6% from empirical studies that approach corporate governance in state-owned companies consider Chinese companies, the greater amount of state-owned companies that exist on China added with the availability of detailed data corroborate these numbers (Daiser & Ysa; Schmitt, 2017). For example, Ding *et al.* (2014) studied state-owned and private companies from China with the objective to analyze the effect of politics influence, resulting from government ownership and from connections of managers, on corporate governance and companies' performance. The results show that the control of companies by agencies from the government significantly increases performance through benefits obtained by the politics influence in these companies.

Even though a greater number of studies focus on state-owned Chinese, the debate about the possible influence that corporate governance can have on economic-financial performance of state-owned companies has receiving more attention by scholars that are considering these kinds of companies from several countries. For example, Subramanian (2015) shows that the practice of corporate governance, through the disclosure of information related to the ownership structure and the shareholder rights and to the structure, process and board of director, positively influences on performance of state-owned companies from India.

Khongmalai and Distanont (2017) analyzed 38 state-owned companies from Thailand with the objective to study the relation between governance practices and performance. The results evidence that only the board of director is unable to conduct a positive performance on state-owned companies investigated. However, the imposition of board for that companies develop areas of activities of internal audit, risk management, internal controls, strategic personnel management and information technology show with effectiveness when the relation of governance is linked to performance.

The study of Shawtari *et al.* (2017) investigated state-owned companies from

Malaysia with the objective to analyze the relation between the features from the board of director and the performance from the companies between 2002 and 2011. The research points a negative relationship between the size of the board and performance, concluding that big board's harm performance, giving that the process of coordination and communication are more difficult. Moreover, the study evidences that the functions of CEO and president of board of director by the same person has a negative relationship with performance.

Mbo e Adjasi (2017) employ agency theory to analyze the determinants of performance in state-owned companies from Sub-Saharan Africa from 1994 to 2013. Using profitability, productivity and operational efficiency as performance measuring, the authors conclude that strengthened board in diversity and competence is positively related to performance by the profit perspective. However, stakeholder's diversity in board results in a negative correlation with performance.

Colleta and Lima (2020) realized a longitudinal study between 2002 and 2017. The authors analyzed state-owned companies' non-dependents from the government, classified as societies of mixed economy and publicly listed. The objective was analyze if the strengthening of corporate governance, analyzed by the board of director and measured by the index of board structure, has positive relationship with performance of the companies. Results indicated that there was a positive and significant relationship between board structure and performance.

Additionally, Colleta and Lima (2020) considered the fact that the law number 13.303/2016 was inductor of best governance practices to the state-owned companies besides to point as limitation of the study the observation to the mechanism "board of director" as indicator of corporate governance. The authors also observed state-owned companies that are publicly listed and made suggestions that novel studies may advance in possible exploitation resulting from the strengthening of corporate governance broader

measured and that evolve listed and non-listed companies. In order to fill this gap, Pellegrini (2019) points that state-owned companies and dependent from the government have an additional particularity and specific in comparison to non-dependent companies from the government. Dependent companies need resources from the Union to pay current and capital expenditure, consequently this need results in more financial dependence from the government.

The governance seeks solutions to agency problems through a conciliation of different stakeholders (Chang *et al.*, 2015; Al-sartawi, 2018; Laksmi & Kamila, 2018; Fontes Filho, 2018), in order to aggregate value to the business and leverage captation of resources and investments, perpetuity of the organizations (Instituto Brasileiro de Governança Corporativa, 2015; Musacchio & Lazzarini, 2015; Laksmi & Kamila, 2018; Coletta & Lima, 2020, Cunha, Freitas & Araújo, 2020). Moreover, the strengthening of corporate governance in state-owned companies results in process more assertive in relation to the choice and selection of their leaders, distancing these companies from the mismanagement political and focusing on technical indications (Silva, 2019; Ferraz, 2018b).

Thus, the discussions and debates around the theme of corporate governance assume the hypothesis that best practices of corporate governance can positively impact on economic-financial performance from the companies through the best decisions, more adequate controls and decreasing of capital cost (Chang *et al.*, 2015; Musacchio, Lazzarini & Aguilera, 2015; Sanad, Al-Sartawi & Abdalmuttaleb, 2016; Anup & Cooper, 2017; Laksmi & Kamila, 2018; Rughoobur, 2018; Ferreira *et al.*, 2019; Cunha, Freitas & Araújo, 2020).

We can note this through the strengthening and structuring of the board of director and fiscal, internal audit, statutory audit and eligibility committees, regime for appointing directors, as well the elaboration of annual letter with the achievement commitments from the objectives of political

public (Martins, 2018; Fontes Filho, 2018). Taken together, these elements result in more administrative and economic-financial efficiency, taking the decreasing of failures, unnecessary costs arising with the rework and in decisions more assertive with the company's objectives, improving their results and, consequently, affecting their economic-financial performance.

Thus, the adoption and improvement of corporate governance in state-owned companies reflects, for example, in more profitability, indicating a better economic-financial performance for state-owned companies or a decreasing in the need of financial support realized by the government to cover loss from state-owned and dependent companies from the government, indicating lower level of financial dependence from the government.

Hence, we hypothesize that:

H1. There is a positive relationship between the adoption and the strengthening of corporate governance practices and the economic-financial performance of state-owned companies.

H1a. There is a negative relationship between the adoption and the of strengthening corporate governance practices in state-owned and dependents companies and their level of financial dependence from the government.

### 3 Method

The population of this study represent 46 Brazilian state-owned companies with direct control of the Union. These companies are divided in 18 financially dependent from the government and 28 non-dependent from the government. Data about governance and performance were collected from official website of *Secretaria de Coordenação e Governança Ministério da Economia, da Secretaria de Coordenação e Governança das Empresas Estatais (SEST)*, and documents registered about this theme on government platforms of public transparency. We adopt as proxy of corporate governance the indicator of State Corporate Governance (IGSEST); for performance, ROA, ROE and IDT, (this last

was considered for the group of state-owned and dependent companies from the government. As control variables, we use size, debt, groups (dependent versus non-dependent), type (state-owned company x mixed economy) and capital (publicly traded x non-publicly). The longitudinal analysis corresponds between 2013 and 2019. We highlight that in 2016 happened the publication of law number 13.303/2016.

The law of state-owned companies number 13.303/2016 stablish several mechanisms of governance to be analyzed by the state-owned companies in order to become these companies more able to broad their results and improve their economic-financial performance (Zymler, 2017; Gomes, 2017; Fontes Filho, 2018; Martins, 2018; Ferraz, 2018b; Silva, 2019). The law number 13.303/2016 considers state-owned companies in a broad way. In other words, this law considers stat-owned companies, mixed economy, dependent and non-dependent from the government, publicly traded and non-publicly traded and that explore economic activities and offer public services (Antunes, 2017; Ferraz, 2018a).

This law also establish mandatory of Brazilian state-owned companies institute and review their internal politics, which are: policy and corporate governance practice; policy of indication from administrators and board of directors; policy of shareholdings proportional to the relevance, materiality and business risks; policy of disclosure information; policy of people management; policy of administration remuneration; policy of transactions with related parts; policy of dividend distribution; policy of risk management; and internal controls and integrity policies (Ferraz, 2018b, Martins, 2018; Fontes Filho, 2018; Silva, 2019).

Considering the objective of this study and the features from the data, we adopted regression for panel data. We also evaluate the model of Pooled, fixed and random effects. For all the tests, we adopt the level of 5% of significance. The statistical analysis was realized using *Stata*. The variables employed are showed in Table 1.

Table 1. Variables

Variable	Theoretical perspective	Operational definition	Prior studies
<b>Independent variables</b>			
IGSEST: Indicator of State Corporate Governance	Measure the quality of corporate governance practices after the law number 13.303/2016 (SEST, 2017).	Indicator compost by questionnaire in three dimensions: Management, Control and Audit; Information transparency; and Boards, Committees and Directors.	Cabral et al. (2019), SEST (2020); Da Silva & Nunes (2019)
<b>Dependent variables</b>			
ROA: <i>Return on Assets</i>	Measure the efficacy of company's administration in relation to the profits from the assets (GITMAN, 2004).	$\frac{\text{Net profit}}{\text{Total asset}}$	Subramanian (2015); Lazzarini & Musacchio (2018); Ding et al. (2014); Colleta & Lima (2020)
ROE: <i>Return on Equity</i>	Measure return obtained from the equity investment (GITMAN, 2004).	$\frac{\text{Net profit}}{\text{Net equity}}$	Colleta & Lima (2020)
IDT: Index of dependence on Treasury / government resources	Indicates the percentage of expenses not covered by the company's own revenues. The higher the index, the greater the dependence on Treasury / government resources (SEST, 2020).	$\frac{\text{Total income} + \text{total expenditure}}{\text{Total expenditure}}$	Pellegrini (2019); SEST (2020)
<b>Control variables</b>			
DEBT: Level of debt	Indicates the proportion in which total assets are financed by third party capital (GITMAN, 2004).	$\frac{\text{Total liabilities}}{\text{Total asset}}$	Ding et al. (2014); Lazzarini & Musacchio (2018); Colleta e Lima (2020)
SIZE: Company size	Company's size has relevant effect on financial variables (DANG; LI; YANG, 2018).	Neperian logarithm of book value of total asset	Ding <i>et al.</i> (2014); Lazzarini & Musacchio (2018); Colleta & Lima (2020)
GROUP: <i>Dummies</i> of groups	Decisions and results of state-owned companies can be influenced by their constitutional objective (PELLEGRINI, 2019).	Dependent from the government x non-dependent from the government	Pellegrini (2019); SEST (2020)
TYPE: <i>Dummies</i> of types	Decisions and results of state-owned companies can be influenced by the shareholding composition.	State-owned company x mixed economy	Pellegrini (2019); SEST (2020)
CAPITAL: <i>Dummies</i> of share capital	Decisions and results of state-owned companies can be influenced by the type of capital.	Publicly traded x non-publicly traded	Pellegrini (2019); SEST (2020)

Source: Elaborated by the authors (2021).

## 4 Results

Table 2 presents descriptive statistics of the sample (data are from December 2019). On Table 1, we can analyze that majority of companies (60,9%) are non-dependents, while 39,1% are dependents; 67,4% are state-owned companies, while 32,6% are mixed economy; and finally, 13% are publicly traded, while 87% are non-publicly traded.

Table 2. Features from companies

Item	N	%
Group	Dependent	18 39,1%
	Non-dependent	28 60,9%
Type of company	State-owned	31 67,4%
	Mixed economy	15 32,6%
Share capital	Publicly traded	6 13,0%
	Non-publicly traded	40 87,0%

Source: Elaborated by the authors (2021).

Table 3 presents the descriptive statistics from the variables. In this table, we can note that IGSEST varied between 1,020 (min) and 10,0 (max), with a mean of 6,498 and moderate variability ( $CV = 40,7\%$ ). Size presented a mean of 119321,023, but with high variability ( $CV > 80\%$ ), what can be observed by the minimum and maximum values. Companies debt had a mean of 0,785, but with high dispersion of values ( $CV > 80\%$ ). Moreover,

we also can note that companies are heterogeneous ( $CV > 80\%$ ) in relation to the ROA and ROE, however they are more homogeneous for the index of dependence on Treasury / government resources (IDT) ( $CV < 30\%$ ). In relation to the median, 50% from the companies present IGSEST under 6,610; size under 1795; Debt under 0,620; ROA under -0,168; ROE under 0,156 and IDT under 86,6.

**Table 3.** Descriptive measurement from the variables

Variables	Min	Max	Median	Mean	S.D	Coefficient
IGSEST	1,02	10	6,61	6,498	2,647	40,70%
Size	0,864	1989086,08	1795,591	119321,02	376297,2	315,40%
DEBT	0,006	7,893	0,62	0,785	0,969	123,50%
ROA	-120,439	58,861	-0,168	-4,496	19,269	-428,60%
ROE	-236,199	168,086	0,156	-7,165	41,134	-574,10%
IDT	14,85	100	86,657	79,318	21,492	27,10%

*Note.* Values calculated without consider the year (Pooled).  
Source: Elaborated by the authors (2021).

Table 4 presents correlation matrix from the variables. The greatest positive correlation recorded was between the variables ROA and ROE ( $r = 0,6536$ ;  $p < 0,05$ ). Also, high negative correlation and significant happened between the index of IDT and ROA and ROE ( $r = -0,6457$  e  $r = -0,6202$ ,  $p < 0,05$ ), consistently signaling that the increase on ROA and ROE

promotes decreasing of companies' dependence from the government. We also found a negative correlation between ROE and debt ( $r = -0,3896$ ,  $p < 0,05$ ). Another positive correlation was between size and IGSEST ( $r = 0,4087$ ,  $p < 0,05$ ), signaling that larger companies tend to have higher levels of corporate governance.

**Table 4.** Correlation matrix

Variables	1	2	3	4	5	6	7	8	9
1 ROA	1.0000								
2 ROE	0.6536*	1.0000							
3 IDT	-0.6457*	-0.6202*	1.0000						
4 IGSEST	0.0509	0.1381	-0.1025	1.0000					
5 Size	-0.0131	0.0378	-0.1836	0.4087*	1.0000				
6 DEBT	-0.0242	-0.3896*	-0.0277	-0.0382	0.1129*	1.0000			
7 Group	-0.0282	-0.0919	.	-0.1966*	-0.3643*	0.1923*	1.0000		
8 Type	0.0747	-0.0566	.	-0.0522	-0.1682*	0.1035	0.5577*	1.0000	
9 Capital	-0.0373	0.0556	.	0.2958*	0.5294*	0.0852	-0.3105*	-0.5568*	1.0000

*Note.* \*  $p < 0.05$ .

Source: Elaborated by the authors (2021).

To test the hypotheses, we adopt regression model for panel data. Then, we analyzed the adequation to use the models

pooled, random effects (RE) or fixed effects (FE). To choose between the models RE and FE, we employ Hausman test, which did not



reject the hypothesis null (sig.  $x^2 > 0,05$ ), leading us to use RE model. To choose between the models RE and pooled, we employ the test of LM from Breusch-Pagan, which did not indicate rejection from the hypothesis null related to the adequation of model pooled in relation to the model RE (sig.  $x^2 < 0,05$ ). Therefore, we employ to the analysis of the data a panel data with random effects and robust standard errors the heteroscedasticity and potential autocorrelation.

Table 5 presents the results based on the regression of panel data. We use different models of regression and proxies (ROA, ROE and IDT) to test the hypotheses. First, we only include control variables (Models 1, 4 and 7). Second, we estimated the effects of improvement from the governance on performance without the controls (Models 2, 5 and 8) and, finally, we use the complete models (Models 3, 6 and 9).

**Table 5.** Regression results

Variables	ROA			ROE			IDT		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Hypothesized effect</i>									
IGSEST		0.09 (0.11)	0.11 (0.12)		0.04* (0.02)	0.04 (0.02)		-0.13 (0.10)	-0.13 (0.12)
<i>Controls</i>									
Size	0.00 (0.04)		-0.02 (0.03)	0.00 (0.00)		-0.00 (0.00)	-0.06 (0.04)		-0.06 (0.04)
DEBT	-0.17 (0.41)		0.16 (0.44)	-0.18*** (0.04)		-0.05* (0.02)	0.25*** (0.06)		-0.05 (0.24)
Group	-0.05 (0.23)		-0.06 (0.25)	0.01 (0.03)		-0.01 (0.02)	0 (.)		0 (.)
Typo	0.20 (0.25)		0.04 (0.27)	0.00 (0.03)		0.03 (0.02)	0 (.)		0 (.)
Capital	0.11 (0.33)		-0.00 (0.30)	0.03 (0.02)		0.036 (0.02)	0 (.)		0 (.)
Constant	2.46*** (0.31)	2.48*** (0.22)	2.49*** (0.29)	5.46*** (0.02)	5.36*** (0.03)	5.39*** (0.04)	4.54*** (0.29)	4.50*** (0.15)	4.91*** (0.29)
Observations	273	121	121	320	137	137	107	53	53
Companies	46	44	44	46	46	46	18	18	18
R-sq: within	0.01	0.01	0.00	0.15	0.02	0.08	0.11	0.00	0.00
R-sq: between	0.00	0.00	0.02	0.31	0.03	0.02	9.8e-09	0.08	0.1
R-sq: overall	0.01	0.00	0.01	0.17	0.02	0.05	0.01	0.01	0.03

*Note.* \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Models 7 to 9 test H1 and then, they only consider state-owned companies dependent from the government.

Source: Elaborated by the authors (2021).

Hypothesis 1 predicts a positive relationship between the adoption and the strengthening of corporate governance practices and the economic-financial performance of state-owned companies. Models 3 and 6 show the main tests from H1. We found a positive and insignificant effect of corporate governance on ROA ( $\beta = 0,11$ ,  $p > 0,05$ ) and ROE ( $\beta = 0,04$ ,  $p > 0,05$ ). The directions of the effects are aligned with the

prediction of H1, however there is no significance, leading us to conclude that H1 is partially supported.

Hypothesis 1a predicts a negative relationship between the adoption and the strengthening of corporate governance practices in state-owned and dependents companies and their level of financial dependence from the government. Model 9 reports the main test of H1a. We found a

negative and insignificant effect of corporate governance on the level of dependence from the government ( $\beta = -0,13$ ,  $p > 0,05$ ). The direction from the effect also is aligned with the prediction of H1a, however, there is no significance, leading us to partially support H1a.

Although no significant, results are consistent with Subramanian (2015), Mbo and Adjasi (2017) and Colleta and Lima (2020), when these scholars suggest a positive relationship between corporate governance and economic-financial performance of state-owned companies. The absence of significance also can be related with a greater complexity when compared to the governance of private companies (Organisation for Economic Co-operation and Development, 2015; Peng *et al.*, 2016; Wincop, 2017), as well the additional need to meeting public policies inclines decision-making for the benefit of political interests and not in relation to state-owned companies and the slowness feature of state-owned institutions and companies. Therefore, we may consider that this fact can explain the absence of significance on results of the relation between governance and performance.

Thus, results founded are partially aligned with the literature and with the argument that corporate governance is a tool that promotes organizations, become them more effective and able to generate value through the improvement of their administrations, the way to manage and face responsibilities, impacting in a better economic-financial performance (Musacchio, Lazzarini & Aguilera, 2015; Sanad, Al-Sartawi & Abdalmuttaleb, 2016; Anup & Cooper, 2017; Ferreira *et al.*, 2019).

## 5 Final remarks

Based on agency theory, this study seeks to contribute to the thematic analyzing the adoption and the strengthening of corporate governance and their resulting on performance of state-owned companies. Therefore, it was employed as empirical context the Brazilian state-owned companies that, by force of law, adopted and started to monitor corporate

governance mechanisms. Thus, a quantitative and longitudinal approach was adopted, between 2013 and 2019, for the analysis of all Brazilian and state-owned companies directly controlled by the Union, dependent and not dependent from the government.

The main results suggest a positive relationship between the adoption and the strengthening of corporate governance mechanisms and economic-financial performance of state-owned companies. Moreover, results also suggest a negative relationship between the strengthening of corporate governance mechanisms in dependent state-owned companies and the level of financial dependence from the governments. In sum, results indicate that the adoption and the strengthening of corporate governance mechanisms by state-owned companies can positively influence economic-financial performance and reduce companies' financial dependence from the government. However, these results did not present a significant statistical relation lower than 5% and, therefore, we cannot accept our hypotheses proposed.

A possible explanation for this can be the feature of slowness from state-owned companies, such slowness could impact in adoption and implementation of aspects related to corporate governance resulting from Law number 13.303/2016. State-owned companies may comply with an entire legal framework and a set of norms from the direct and public administration that imposes to the state-owned companies the obligation to comply with rites and requirements that directly impact in the adoption and the effects of corporate governance. For example, the law that established obligation in the adoption of the corporate governance mechanisms was approved in 2016, however, its obligation started next year.

Moreover, managers from state-owned companies do not have all the mechanisms that managers from private companies have to implement new projects and achieve objectives, for example, hiring and firing, remuneration and incentive policies as well as relatively strong syndicates. State-owned

companies also do not have the guarantee that in case of damage or financial difficulties will receive government support to face these problems. Therefore, the effect of the adoption and the strengthening of corporate governance mechanisms by state-owned companies can be latecomers. Allied to the slowness, sometimes the seek for a better economic and financial performance share space with the mission in attending to the public politics, promoting the social, economic and politics development from the context that these companies are inserted.

This study contributes to the literature in several ways. The study helps to shed light on the understood aspects of the theme and includes in the discussion the delayed aspect of the effect from corporate governance on state-owned companies. In managerial aspects, this study supports managers to make decisions based on the effectiveness from the corporate governance of state-owned companies. Moreover, the paper also supports formulators of public politics and regulated institutions from these companies.

This study also has limitations that, even with scholas efforts, they exist and can offer an avenue for future researches. The companies from the sample are from a unique country. Moreover, the time of analysis after the law that obligate the adoption of corporate governance mechanisms can be relatively short. The techniques employed can limit the understanding of the relation. Thus, we suggest that future studies extend the period of analysis and incorporate other countries as well comparative analysis among countries. Future studies also can adopt qualitative analysis and case studies of "success" and "failure" in the adoption and strengthening of corporate governance mechanisms and their effects on economic-financial performance. Finally, we also suggest that scholars include state-owned companies that belong to the state (federal government) and cities.

## References

Aguilera, R. V. *et al.* (2015). Connecting the Dots – bringing external corporate

- governance into the corporate governance puzzle. *The Academy of Management Annals*, 9(1), 483-573.
- Aguilera, R. V., Judge, W. Q., & Terjesen S. A. (2018). Corporate Governance Deviance. *Academy of Management Review*, 43(1), 87-109.
- Al-Sartawi, M. A. (2018). Corporate Governance and Intellectual capital: evidence from gulf cooperation council Countries. *Academy of Accounting and Financial Studies Journal*, 22(1) 1-12.
- Altounian, C. S., Souza, D. L., & Lapa, L. R. G. (2017). *Gestão e governança pública para resultados: uma visão prática*. Belo Horizonte: Fórum.
- Antunes, G. A. (2017). *Estatuto jurídico das empresas estatais: Lei nº 13.303/2016 comentada*. Belo Horizonte: Fórum.
- Anup, A., & Cooper, T. (2017). Consequences of corporate governance of accounting scandals: Evidence from Senior Management, CFO and Auditor's Turnover. *Quarterly Journal of Finance*, 7, 141.
- Brasil. (2016). *Lei nº 13.303 de 30 de junho de 2016*. Dispõe sobre o estatuto jurídico da empresa pública, da sociedade de economia mista e de suas subsidiárias, no âmbito da União, dos Estados, do Distrito Federal e dos Municípios. Brasília: Senado Federal.
- Brasil. (2019). *IG Sest*. Disponível em: <http://www.planejamento.gov.br/empresas-estatais-igsest>.
- Bueno G. *et al.* (2018). Mecanismos externos de governança corporativa no Brasil. *Revista contabilidade, gestão e governança*, 21(1), 120-141.
- Cabral, E. C. S., Soares, F. A. R. & Silva J. A. M. (2019). Empresas estatais: políticas públicas, govenança e desempenho. In: E. C. S. Soares *et al.* *Avaliando políticas públicas a partir dos resultados do IG-SEST*. Brasília: IPEA.
- Chang, Y.-K. *et al.* (2015). Corporate governance, product market competition and dynamic capital structure. *International Review of Economics and Finance*, 38(1), 44-55.

- Coletta, C., & Lima, R. A. S. (2020). Board of directors, performance and firm value in brazilian listed state-owned enterprises. *Revista Brasileira de Finanças*, 18(2), 1-28.
- Cunha, T. N., Freitas, D. S. B., & Araújo, R. M. (2020). Governança Corporativa e Lucro Estatal: uma Análise a Partir da Lei das Estatais. *Revista FSA*, 17(12), 52-79.
- Da Silva, A. P. M., & Nunes, P. R. C. (2019). Nível de governança das empresas estatais controladas pelo estado do Ceará à luz da lei 13.303/2016 e decretos estaduais regulamentadores. *Contextus – Revista Contemporânea de Economia e Gestão*, 17(3), 8-39.
- Daiser, P., Ysa, T., & Schmitt, D. Corporate governance of State-owned enterprises: a systematic analysis of empirical literature. *International Journal of Public Setor Management*, 30(5), 447-466.
- Dang, C., Li, Z., & Yang, C. (2018). Measuring firm size in empirical corporate finance. *Journal of Banking and Finance*, 86, 159-176.
- Detthamrong, U., Chancharat, N., & Vithessonthi, C. (2017). Corporate governance, capital structure and firm performance: evidence from Thailand. *Research in International Business and Finance*, 42(1), 689-709.
- Ding, S. *et al.* (2014). Executive political connections and firm performance: comparative evidence from privately-controlled and state-owned enterprises. *International Review of Financial Analysis*, 36, 153-167.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *The Academy of Management Review*, 14(1), 57-74.
- Ferraz, L. (2018). Estatuto das empresas estatais e governança corporativa no Brasil. In L. Ferraz. *A prevenção da corrupção e outros desafios à boa governação da administração pública*. Lisboa: Alameda da Universidade.
- Ferraz, S. (2018). Das regras de governança corporativa, transparência e gestão de riscos. *Revista de Direito Administrativo e Infraestrutura*, 7(29), 109-137.
- Ferreira, R. M. *et al.* (2019). Governança corporativa: um estudo bibliométrico da produção científica entre 2010 a 2016. *Organizações em Contexto*, 15(29), 323-342.
- Fontes Filho, J. R. (2018). A governança corporativa em empresas estatais brasileiras frente a lei de responsabilidade das estatais (Lei nº 13.303/2016). *Revista do Serviço Público*, 69, 209-238, 2018. doi:10.21874/rsp.v69i0.
- Fontes Filho, J. R., & Alves, C. F. (2018). *Mecanismos de controle na governança corporativa das empresas estatais: uma comparação entre Brasil e Portugal*. São Paulo: FGV Caderno, Ebape.
- Fortini, C., & Shermam, A. (2017). Governança pública e combate à corrupção: novas perspectivas para o controle da Administração Pública brasileira. *Interesse Público*, 19, 102, 27-44.
- Gitman, L. J. (2004). *Princípios de Administração Financeira* (10. ed.). São Paulo: Pearson.
- Gomes, C. P. B. (2017). *A nomeação de dirigentes de estatais a partir da lei 13.303/16*. Araçatuba: Juris UniToledo.
- Grosman, A., Okhmatovskiy, I., & Wright, M. (2016). State control and corporate governance in transition economies: 25 years on from 1989. *Corporate Governance: An International Review*, 24(3), 200-221.
- Hermasi, N. (2017). The Impact of Corporate Governance on Capital Structure: a new perspective. *International Journal of Business and Economics Perspectives*, 12(1).
- Instituto Brasileiro de Governança Corporativa (IBCG). (2015). *Código das melhores práticas de governança corporativa* (5. ed). São Paulo: IBCG.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360. doi: 10.2139/ssrn.94043.
- Khongmalai, O., & Distanont, A. (2017). Corporate governance model in Thai state-owned enterprises: structural equation

- modelling approach. *Corporate Governance: The International Journal of Business in Society*, 17(4), 613-628.
- Laksmi, C. A., & Kamila, Z. (2018). The effect of good corporate governance and earnings management to corporate social responsibility disclosure. *Academy of Accounting and Financial Studies Journal*, 22(1), p. 1-16.
- Lazzarini, S. G., & Musacchio, A. (2018). State ownership reinvented? Explaining performance differences between state-owned and private firms. *Corporate Governance: An International Review*, 26(4), 255-272.
- Marcon, R., & de Souza, E. M. (2007). Comparative study between economic and market performance: the case of companies included in the levels of corporate governance. *Revista de Negócios*, 12(1), 88-103.
- Martins, H. (2018). A implementação de medidas de governança corporativa trazidas pela Lei nº 13.303/2016 e principais impactos nas empresas estatais de menor porte. *Revista de Direito Público da Economia*, 16(61), 93-118.
- Maximiano, G. (2017). Aplicação de regras de compliance à luz da Lei nº 13.303/2016. *Raízes Jurídicas*, 9(2), 211-232.
- Mbo, M., & Adjasi, C. (2017). Drivers of organizational performance in state owned enterprises. *International Journal of Productivity and Performance Management*, 66(3), 405-423.
- Mussachio, A., Lazzarini, S. G., & Aguilera, R. V. (2015). New varieties of state capitalism: strategic and governance implications. *The Academy of Management Perspectives*, 29(1), 115-131.
- Mussachio, A., & Lazzarini, S. G. (2015). *Reinventando o capitalismo de Estado: o leviatã nos negócios: Brasil e outros países*. São Paulo: Portfolio-Penguin.
- Oliveira, A. G., & Pisa, B. J. (2015). IGovP: índice de avaliação da governança pública — instrumento de planejamento do Estado e de controle social pelo cidadão. *Revista de Administração Pública*, 49(5), 263-290.
- Organisation for Economic Co-operation and Development (OCDE). *Guidelines on corporate-governance of state-owned enterprises* (2. ed). Paris: OECD Publishing.
- Pagnussat, A. et al. (2019). Governança corporativa: ferramenta para mitigar os conflitos de agência. *Revista Unemat de Contabilidade*, 8(16), 84-98.
- Pellegrini, J. (2019). Empresas estatais: políticas públicas, govenança e desempenho, In J., Pelledrini. *Relações com o tesouro e valor*. Brasília: IPEA.
- Peng, M. W. et al. (2016). Theories of the (state-owned) firm. *Asia Pacific Journal of Management*, 33, 293-317.
- Pinho, C. A. B. (2017). Considerações sobre um ano de vigência do sistema de contratação na lei de empresas estatais (Lei nº 13.303/2016). *Revista de Contratos Públicos*, 6(11), 35- 54.
- Rughoobur, S. (2018). An Assessment of good corporate governance in state owned enterprises of Mauritius. *Studies in Business and Economics*, 13(1), 166-180.
- Sanad, Z., Alsartawi, S., & Abdalmuttaleb, M. A. (2016). Investigating the relationship between corporate governance and Financial Reports of the Internet (IFR): Evidence from Bahrain Bourse. *Jordan Journal of Business Administration*, 12(1), 239-269.
- Sest. (2017). *Boletim das Empresas Estatais Federais*. Brasília: Ministério do Planejamento, Desenvolvimento e Gestão, Secretaria de Coordenação e Governança das Empresas Estatais.
- Sest. (2020). *Boletim das Empresas Estatais Federais*. Brasília: Ministério do Planejamento, Desenvolvimento e Gestão, Secretaria de Coordenação e Governança das Empresas Estatais.
- Shawtari, F. A. et al. (2017). Board characteristics and real performance in Malaysian state-owned enterprises (SOEs). *International Journal of Productivity and Performance Management*, 66(8), 1064-1086.

- Shehata, N. F. (2016). Assessment of corporate governance disclosure in the GCC countries using the unctad isar benchmark. *The Journal of Developing Areas*, 50(2), 453-460.
- Silva, M. S. (2019). Empresas estatais: políticas públicas, governança e desempenho. In M. S., Silva. *Teoria e política pública de governança corporativa de empresas estatais no Brasil*. Brasília: IPEA.
- dos Santos Silva, E., dos Santos, J. F., & Almeida, M. A. (2012). Os efeitos dos mecanismos de governança corporativa sobre os ratings de crédito das debêntures. *Revista de Negócios*, 17(3), 80-93.
- Subramanian, S. (2015). Corporate governance, institutional ownership and firm performance in Indian state- owned enterprises. *Asia-Pacific Journal of Management, Research and Innovation*, 11(2), 117- 127.
- Whincop, M. J. (2017). *Corporate Governance in Government Corporations*. Brisbane, Australia: Routledge.
- Zymler, B. (2017). Considerações sobre o estatuto jurídico das empresas estatais (Lei 13.303/2016). *Interesse Público*, 19(102), 15-26.

## COVID-19 and the Co-production of Social and Government Control Agencies

Gislaine Borges<sup>1</sup>, Luis Moretto Neto<sup>2</sup>

<sup>1</sup> Universidade Federal de Santa Maria (UFSM) - [gislaineebgs@gmail.com](mailto:gislaineebgs@gmail.com)

<sup>2</sup> Universidade Federal de Santa Maria (UFSM) - [lmneto75@gmail.com](mailto:lmneto75@gmail.com)

### KEYWORDS

Control Agencies,  
COVID-19,  
Co-production,  
Theory P.

Received 27.02.2021

Reviewed 12.04.2021

Accepted 15.05.2021

ISSN 1980-4431

Double blind review



### ABSTRACT

This article aims to identify the occurrence of co-production of public services between social and government agencies of control, during the fight against COVID-19, in 2020, in Brazil. Having as theoretical and methodological proposal the Theory P of Alberto Guerreiro Ramos, consultations were made in the official websites of two state control institutions - the Office of the Comptroller General (CGU) and the Brazilian Federal Court of Accounts - and three entities representing organized civil society - the Brazilian Social Observatory, the Transparency Brazil and the Transparency International. Based on the collected data (news, newsletters, reports, online information panels, and other publications), a content analysis based on the theoretical framework built was carried out. The results showed that the analyzed organizations have developed initiatives that, individually or in partnership with other institutions, have contributed to reducing the impacts of the current health crisis (COVID-19). The evidence also revealed that the co-production of public services by the agencies of control embraced converges with the meaning of objective possibility postulated by Guerreiro Ramos.

### PALAVRAS-CHAVE

Entidades de Controle,  
COVID-19,  
Coprodução,  
Teoria P.

### RESUMO

Este artigo visa identificar a ocorrência de coprodução de serviços públicos entre instâncias sociais e governamentais de controle, durante o combate à COVID-19, em 2020, no Brasil. Tendo como proposta teórico-metodológica a Teoria P de Alberto Guerreiro Ramos, foram efetuadas consultas nos sítios eletrônicos oficiais de duas instituições estatais de controle – Controladoria Geral da União (CGU) e Tribunal de Contas da União (TCU) – e de três entidades representantes da sociedade civil organizada – Observatório Social do Brasil, Transparência Brasil e Transparência Internacional. Com base em dados coletados (notícias, boletins informativos, relatórios, painéis *on-line* de informações, demais publicações), realizou-se a análise do conteúdo a partir do arcabouço teórico construído. Os resultados demonstraram que as organizações analisadas desenvolveram iniciativas que, individualmente ou em parceria com outras instituições, contribuíram para reduzir os impactos da atual crise sanitária (COVID-19). As evidências revelaram também que a coprodução de serviços públicos pelas instâncias de controle abordadas converge com a aceção de possibilidade objetiva postulada por Guerreiro Ramos.

## 1 Introduction

In early March 2020, the World Health Organization (WHO) classified the disease caused by the new coronavirus (Sars-CoV-2) as a pandemic. The first registers, publicly available about COVID-19 come from December 2019 in Wuhan, China (Ribeiro, 2020). Since the outbreak of the virus, no country could fight it alone, especially in a borderless world. For this reason, given its dimensions and peculiarities, the crisis, triggered by the pandemic, proved to be a great challenge to be overcome by contemporary society (Cheng *et al.*, 2020).

From the governmental perspective, COVID-19 exposed the limitations and weaknesses of the public machine to act in emergency situations, as the environments presented are characterized by high complexity and unpredictability of events. According to McConnell and Drennan (2006), when a crisis invades a community, a country, or reaches extraterritorial proportions, such as the new coronavirus, this requires from decision-makers coordinated actions, quick responses to mitigate the problem, as well as transparency and timeliness of the information available to the population.

In this sense, when the performance of governments starts to frustrate society's expectations, the crises can sound an "alarm of democracy", considering that protecting citizens against the impacts of possible threats is the State's responsibility and it is expected to have this capacity (Schmidt, Mello & Cavalcante, 2020). Moreover, in the past, public administration was marked by a bureaucratic and centralizing bias in decisions. Currently, however, it has sought to adapt to meet the demands of a population that demands more democracy, transparency, participation, accountability, and especially the co-production of public goods and services (Moretto Neto, Salm & Souza, 2014).

Furthermore, since COVID-19 was declared, by Ordinance MS n. 188, of February 3, 2020, a public health emergency of national importance due to human infection by the new coronavirus, the Brazilian population, to fill the social gaps not supplied by the State, has mobilized and co-produced the public services it needs. Concerning social control, it is worth highlighting the role played by non-governmental organizations (NGOs), such as the Brazilian Social Observatory

(BSO), Transparency Brazil, and Transparency International. These NGOs, by promoting integrity, transparency, and the improvement of public institutions, reflect autonomy and engagement of the population with the state (Goodwin, 2019), generating a balance of power between the respective agents (Zwick *et al.*, 2012).

In addition, the social control carried out by NGOs shows convergence with the pedagogical initiatives and the inspection and monitoring actions launched by the Office of the Comptroller General (CGU) and the Brazilian Federal Court of Accounts in 2020, in the context of the pandemic. This possible alignment between social and government agencies of control led to the emergence of the following research question: What were the public services co-productions perceived between state and society control organizations in the fight against the pandemic in 2020?

To fill this research gap, this study aimed to perform a critical analysis of the interaction between organized civil society entities and government control agencies - the Brazilian Federal Court of Accounts and the Office of the Comptroller General - identifying co-production initiatives undertaken by them, in 2020, during the fight against the COVID-19 pandemic. To this end, the research was structured in five sections: the introduction (i), followed by the theoretical framework (ii), the methodology used (iii), the results achieved by the study (iv), and, finally, the final considerations (v).

## 2 Theoretical Framework

The purpose of this section is to provide theoretical support for the analyses carried out in the subsequent sections of this study. To this end, it will be divided into three parts. First, aspects related to crisis management will be presented (2.1), then civil society participation from the perspective of Guerreiro Ramos' Theory P (2.2), and, finally, the co-production of public services will be addressed, as well as its main concepts and characteristics (2.3).

### 2.1 Crisis Management

By their very nature, crises are chaotic, unpredictable, threatening, and do not provide decision-makers with the time or information they



would like to have before executing planned actions. Crises, in this sense, can present themselves in a variety of situations, decimating entire regions and cities (Hurricane Katrina in New Orleans, 2005; and Boxing Day tsunami in South Asia, 2004), posing threats to human and animal welfare (Avian flu outbreak in 2005; and SARS in 2002), and can even destabilize governments (McConnell & Drennan, 2006).

In 2020, with the pandemic triggered by the new coronavirus, it was possible to see how devastating are the impacts caused by a crisis. The virus spread rapidly across the countries of the globe, reflecting not only on health care, but also on the economy, human rights, international transportation, trade, tourism, and other significant segments.

At the same time, COVID-19 proved to be quite uneven in terms of its effects (Teles, 2020), since, if there was something democratic about the pandemic's destructive impacts, it was soon confirmed that structural inequality made and continues to make the most vulnerable, in different dimensions, its main victims (Cravo, 2020). The pandemic also reinforced the conviction that security is multifaceted and understanding, which demonstrates that crisis management strategies need to be increasingly inclusive (Pirozzi, 2020), with transparent communication being one of its pillars, to facilitate access and information sharing among the actors involved in the process (Lapão, 2020).

Furthermore, it is highlighted that major crises strike at the core of a nation's democracy and governance. Given the dimensions of these crises, democracy and governance pose a challenge not only of capacity but also of legitimacy and trust (Christensen & Lægheid, 2020). In the context of public administration, in special, COVID-19 has challenged, politically and technically, the decision-making process and government structures around the world, which is not for nothing, after all, the unpredictability and adaptations required by it are numerous (Coelho *et al.*, 2020).

However, a positive aspect of crises is that they provide an opportunity for public managers to build legitimacy in the eyes of the population. Norway's response to the coronavirus was, according to Christensen and Lægheid (2020), an example of effective decision-making, handling, and understanding of the situation. After three

weeks of more restrictive measures, the country became the first in Europe to claim that COVID-19 was under control, as the number of hospitalized patients decreased and deaths remained low. It is emphasized, however, that Norway's high performance should be understood in the context of a professional and reliable bureaucracy, a strong and economically well-off state, and a high welfare state and low population density (Christensen & Lægheid, 2020).

In the case of Brazil, the study of Coelho *et al.* (2020) is evidenced, when the authors report how the coordination of the activities of technical-managerial nature of the areas-mean of the Municipal Government of São Paulo was fundamental for the performance of the municipal funeral service in the fight against COVID-19. Among others, the coordination of administrative functions in the areas of finance, human resources, processes and information technology (IT), purchasing and contracts, logistics and operations, and communication/marketing was vital (Coelho *et al.*, 2020).

In this sense, it is clear that facing a crisis, especially the current pandemic (COVID-19), requires the mobilization of various actors, whether governmental or from civil society. Schmidt, Mello, and Cavalcante (2020) explain that the possible solutions to face a crisis will not originate or result from an isolated way. The author concludes that the state's performance will be evaluated not only by the restoration of normality to people's lives but also by society's perception of the crisis management process (Schmidt, Mello & Cavalcante, 2020).

## 2.2 Social participation from the perspective of the objective possibilities of Alberto Guerreiro Ramos

Traditionally, both in practice and in the theories of public administration, a state-centered and technocratic vision has prevailed, in which the State is placed as the main or exclusively responsible for the act of governing. In recent decades, however, there seems to be consensus on the need to rethink this conception, considering that the challenges imposed by the management of public problems are increasingly complex and challenging (Andion, 2020).

In this sense, the involvement of civil society is beneficial, since it is the beneficiary of the goods and services produced by the public sector. According to Schommer *et al.* (2015), the inclusion

of various agents and mechanisms that produce information, control, and accountability favors the image of a transitory center, rather than a vision focused on mechanisms of control of and over the State.

Considering that the world today operates under the aegis of several changes, the current paradigm no longer offers support to meet the new demands presented by society. These demands can even be observed in the street demonstrations for the common good, opposing individual and private interests (Salm, 2015). In Brazil, in particular, the participation of the population in the acts issued by the public administration is historically associated with popular mobilization, which reached its peak in the 1970s and 1980s, when society organized itself for the reforms of the country. This environment stimulated the articulation of non-governmental organizations (NGOs) around issues related to the individual and collective quality of life of citizens (Paula, 2005).

From this perspective, Paula (2007), in dealing with critical studies in administration as a space for emancipation and inclusion of subjects, emphasizes that the works of Alberto Guerreiro Ramos, Maurício Tragtenberg, and Fernando Prestes Motta systematized the bases for the field's research agenda.

Alberto Guerreiro Ramos, in particular, was a great Brazilian intellectual of the 20th century. From the beginning of his writings, he made visible his concern with social relations and their reflection on the emancipation of the individual. Among the structuring themes of his thought, the following stand out: individuals aware of reality, substantive rationality reflected in solidarity with social welfare, and criticism of the paradigm based exclusively on the market (Schmitz Junior *et al.*, 2014).

Salm (2015), when discussing the assumptions and theoretical foundations of the Master's Course in Government Planning, held by Guerreiro Ramos at the Federal University of Santa Catarina (UFSC), in 1980 and 1981, highlights Ramos' proposition of a new paradigm for associated human life. This is because, from which, the demands of individuals encompass greater political participation, effectiveness in the production of the public good, and the practice of ethics in governments (Salm, 2015).

Guerreiro Ramos, as already mentioned, also criticized a vision based exclusively on the market,

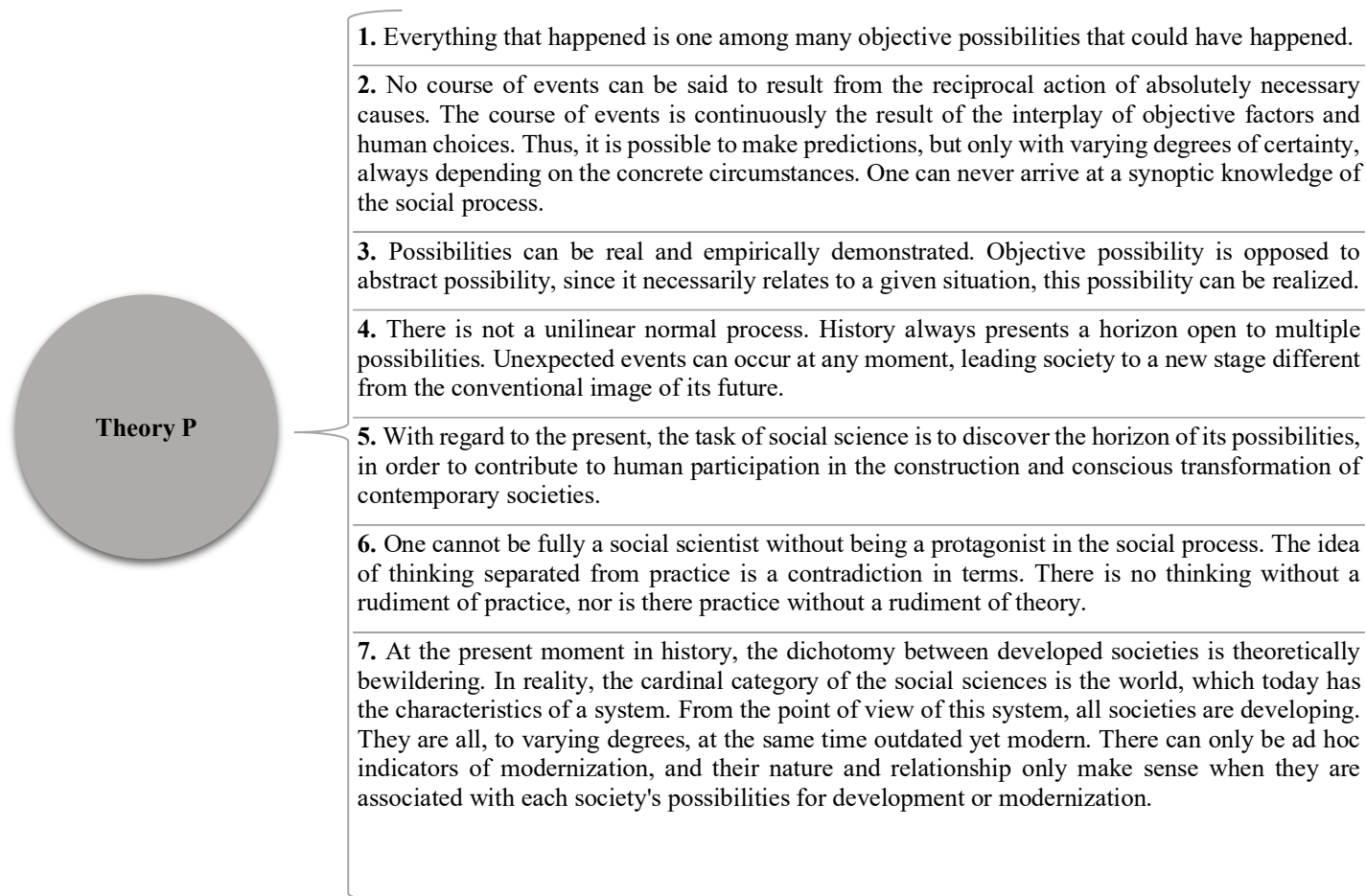
because, he argued, if it prevailed over all human actions and became a basic assumption, it could impair the perception and extension of objective possibilities by individuals (Zwick *et al.*, 2012). This comprehension highlights how the reductionism of the market paradigm limits the exercise of politics and consequently jeopardizes citizen participation in the public sphere (Salm, 2015).

Moreover, Guerreiro Ramos defended the perspective of a multidimensional society, in which the human being is involved in truly substantive activities and whose system of government is capable of formulating and implementing distributive policies and decisions for the promotion of social optimum (Guimarães, 1981). Multidimensionality thus negates the reductionist idea of the human being (someone who behaves passively in society), as advocated by the market-based paradigm. Multidimensionality, therefore, gives the individual a greater dimension, treating him as a political, communitarian, social being, and an integral part of nature (Salm, 2015). Under this approach, individuals can redefine their identities, express interests, and connect with others to produce the goods and services they desire, becoming co-responsible for the process and the results (Schommer *et al.*, 2015).

Furthermore, in "Modernization from a new perspective: in search of the possibility model", Guerreiro Ramos goes further by addressing the classic duality between action and structure from a new perspective that he called Necessity Theory (N) and Possibility Theory (P). Although this study does not focus on the Theory N, it is necessary to highlight that it is based, as explained by Zwick *et al.* (2012), on authors whose speech focused on the defense of circumstance in its deterministic aspect.

In Theory P, in turn, Guerreiro Ramos is based on authors who advocate the potential of action - possibility and circumstances - and necessity (Zwick *et al.*, 2012). In this sense, Theory P in the defense of circumstances is opposite to Theory N, of deterministic character, on the possibility of individual and community action of citizen nature (Corrêa & Passador, 2019). Considering that the organizations object of this study can demonstrate evidence of their actions in the scope of Theory P, it is illustrated, in Figure 1, the synthesis of its presuppositions and foundations.

**Figure 1.** Assumptions of the Theory P



Source: Adapted from Zwick *et al.* (2012)

Based on the assumptions of the Theory P mentioned above, it can be seen that the responses given by Brazilian civil society to the current health crisis (COVID-19) bring to the surface the concept of possibility postulated by Guerreiro Ramos. As Andion (2020) clarifies, the characteristics of the action of the population on public problems, as well as its contribution and limits, in the governmental sphere, open objective possibilities to rethink and reinvent the classical forms of governing, of practicing public governance and in the action of civil society itself (Andion, 2020).

Thus, by considering its own resources and reality, management with the involvement of civil society contributes significantly to the formation of a more democratic Brazilian public administration. In other words, this management converges with Guerreiro Ramos' Theory P, presenting itself as a true objective possibility, since social management is translated as a creative manifestation of the citizen's will (Zwick *et al.*, 2012).

### 2.3 The co-production of public goods and services

Social participation, as provided for by the Brazilian constitution, is an intrinsic element of the democratic rule of law. From this perspective, the dialogue between government and citizens proves to be essential, given that democracy with a deliberative approach requires a propositional action of civil society and the State in the reconfiguration of traditional mechanisms of political decision (Allebrandt, 2016).

Therefore, co-production can emerge from the interaction between these agents, which refers to a strategy for the production of public goods and services, based on the sharing of power and responsibilities between the state, private agents, and the population as a whole (Salm, 2014). However, the operationalization of the co-production of public services, according to the public administration, of which it is an integral part, manifests itself as a highly complex phenomenon (Salm & Menegasso, 2010).

Moreover, co-production has a long and complicated history. Researchers like Vincent and

Elinor Ostrom showed that public goods and services were often delivered or produced by the interaction of multiple actors and organizations. Their findings challenged the dominant view that powerful centralized state bureaucracies were responsible for providing the population with needed goods and services (Goodwin, 2019).

In addition, co-production is an important part of the current public service reform agenda. Given that it can act as a channel to build social inclusion and citizenship (Osborne & Stokosch, 2013). However, while there are arguments in favor of co-participation, there are also obstacles to be overcome. Among the main barriers are the size of social systems, the use of increasingly complex technologies that are difficult for citizens to understand, the time and urgency required by many decisions, and political apathy (Salm & Menegasso, 2010).

There are even situations in which co-production can increase distributional inequalities. As an example, Gazley, Lafontant, and Cheng (2020) study co-production between government and philanthropic institutions for the maintenance of state parks in California and Florida. The results revealed that philanthropy produced benefits by garnering citizen support for the improvement of public spaces. However, it also evidenced that Florida's wealthier counties and those with greater income inequality were the most likely to benefit from a charity supporting a nearby state park.

Goodwin's (2019) study, meanwhile, depicted water co-production in Ecuador. The research draws attention to the strengthening of water associations in the country from alliances with a diverse group of actors, such as state, non-governmental organizations, overseas development agencies, and multilateral institutions. However, the author points out that the greater power gained by organized sectors of society has brought about, in addition to new political opportunities, tensions related to the scope and authority of the state (Goodwin, 2019).

Regarding the co-production actions related to the fight against COVID-19, the research of Cheng *et al.* (2020) stands out. The authors brought the example of Zhejiang, in China, which is one of the most densely populated and developed provinces in the country. Initially, Zhejiang was one of the places most affected by the virus and where cases were first reported. However, the curve quickly flattened out, unlike other provinces,

where cases continued to grow. The success in fighting the pandemic was due to the active participation of community organizations that acted as conduits of communication between the government and its citizens (Cheng *et al.*, 2020).

In Brazil, in turn, the co-production of services by society has reinforced the humanitarian side of the population, whose solidarity actions have multiplied throughout the country. As Andion (2020) reports, on a national level, the actions promoted by society embraced from raising money, food donations, hygiene, and cleaning products, to the purchase of equipment for protection and hospital usage. In the city of Florianópolis, in particular, the author reports actions to help homeless people and the creation of a community bank and social currency, enabling needy communities to purchase food and basic hygiene items.

Considering the empirical studies exposed, it can be seen that citizen participation in the governmental sphere lends a new perspective to public administration. Thus, the debate that is established sheds light on issues related to accountability, the strengthening of co-production networks, the promotion of social capital, and community articulation (Salm & Menegasso, 2010).

Salm and Mengasso (2010), based on the most prominent authors who have written about co-production, have developed five models, namely: nominal co-production; symbolic co-production; functional co-production; representative co-production with sustainability; and co-production through self-mobilization. The conceptualization of each of the models is summarized in the following table:

**Table 1.** Conceptualization of Public Services Co-production Models

Co-production Models	Description
<b>Nominal</b>	Nominal co-production is a strategy for the production of public services through the sharing of responsibilities between people from the community, preferably volunteers, and the public administrative apparatus of the State, with the sole purpose of making these services efficient.
<b>Symbolic</b>	Symbolic co-production is a strategy to involve citizens in the production of public services to demonstrate the presence of the State.

Co-production Models	Description
<b>Functional</b>	Functional co-production is a strategy used by the State public apparatus to produce public services more efficiently and effectively, with the participation of the individual, the group or the collectivity.
<b>Representative with Sustainability</b>	Representative co-production with sustainability is the result of the synergy that is established in the realization of public services in which citizens, community organizations, and the administrative apparatus of the State interact for the common good.
<b>For the Community Self-Mobilization</b>	Co-production for community mobilization is a strategy for the realization of public services in which the whole community participates, guided by ethical principles and normative democracy, with the purpose of keeping society permanently mobilized.

Source: Adapted from Salm e Mengasso (2010)

Table 1 shows that nominal co-production is the sharing of responsibilities among people in civil society who, imbued with a charitable function, volunteer to provide public services. The symbolic co-production lends itself to involving society to demonstrate the presence of the State - it consists of a form of manipulation of the citizen by the State. Functional co-production seeks to involve people in the provision of public services, based on efficiency, results, and individual interest. Representative co-production with sustainability is the result of the interaction between citizens and community organizations, which together produce the public services themselves. And co-production through community self-mobilization occurs when the community is permanently mobilized and involved in the realization of public services (Moretto Neto, Salm & Souza, 2014).

The co-production models listed in Table 1 will be resumed in section 4 of this study. At that time, the types of co-production that occurred between social and government control agencies during the fight against COVID-19 in 2020 in Brazil will be presented.

### 3 Methodology

As a theoretical and methodological proposal, this research used the concepts of Alberto Guerreiro Ramos' Theory of Possibilities. As for its

purposes, this study aimed to identify the opportunities for co-production that occurred between organized civil society and the Brazilian government's control agencies in the fight against COVID-19 in 2020.

To this end, these sample units were selected: the Brazilian Federal Court of Accounts and the Office of the Comptroller General as representatives of the federal government's internal and external control agencies. And, concerning social control, three NGOs from the organized civil society were chosen. They are the Brazilian Social Observatory (BSO), Transparency Brazil, and Transparency International.

In addition, this research adopted a descriptive, documentary, and qualitative approach. Data collection was carried out by consulting the websites of the entities analyzed, compiling the main actions and initiatives undertaken by them in the context of the pandemic. Table 2 illustrates the most relevant information found in the official websites of the sample organizations.

**Table 2.** Main sources of information extracted from the websites of the sample units

Institutions Analyzed	Information Sources	Institution's Website
<b>CGU</b>	Dashboard (tool), news, campaigns, platforms.	<a href="https://www.gov.br/cgu/pt-br/coronavirus">https://www.gov.br/cgu/pt-br/coronavirus</a>
<b>TCU</b>	Hotsite, Dashboard (tool), booklets, news, projects, other publications.	<a href="https://portal.tcu.gov.br/coopera/">https://portal.tcu.gov.br/coopera/</a>
<b>Brazilian Social Observatory</b>	Newsletters, information platform, documents, tools.	<a href="https://osbrasil.org.br/">https://osbrasil.org.br/</a>
<b>Transparency Brazil</b>	Projects, publications, technical and public notes, reports, news.	<a href="https://www.transparencia.org.br/">https://www.transparencia.org.br/</a>
<b>Transparency International Brazil</b>	Reports, informative guides, documents, tools, news.	<a href="https://transparenciainternacional.org.br/home/destaques">https://transparenciainternacional.org.br/home/destaques</a>

Source: Created by the authors of this article (2021)

As a sample period, it is considered the months of February/2020 - when the MS Ordinance No. 188, February 3, 2020, declared Public Health Emergency of National Importance due to Human Infection by the new Coronavirus (2019-nCoV) - to December/2020, closing of the annual calendar. Bardin's content analysis (2016) was used to evaluate the data, since, after the survey of information and relevant documents, the material was organized and analyzed in light of the theoretical framework built. Ultimately, it should be mentioned that the co-productions identified, from consultations on the websites of the institutions addressed, are only a sample list, and there may be, therefore, other actions undertaken, but not considered in this research.

#### 4 Analysis of Results

This section first discusses the main control actions implemented by the Brazilian Federal Court of Accounts (TCU) and the Office of the Comptroller General (CGU) regarding the fight against COVID-19 in 2020. Then, from the perspective of social control, the participation of organized civil society is presented, highlighting the initiatives undertaken by the Social Observatory of Brazil, Transparency Brazil, and Transparency International Brazil. Finally, the types of co-production promoted by the organizations analyzed in the context of the pandemic are identified.

##### 4.1 The work of the Brazilian Federal Court of Accounts and the Office of the Comptroller General in the fight against COVID-19

The Office of the Comptroller General (CGU) is the central body for internal control at the federal level of the Brazilian government. Its competencies include defending public assets and increasing management transparency through audits, corrections, ombudsman's office, and preventing and fighting corruption. At the same time, the CGU is responsible for exercising technical supervision over the agencies that make up the internal control system, the correctional system, and the ombudsman units of the federal executive branch, providing, where appropriate, the necessary normative guidelines (Brazil, 2021a).

Regarding the mobilization of the CGU to fight the pandemic, several measures have been

adopted, particularly in the preventive aspects, related to the development and improvement of ombudsman and transparency channels, as well as special government auditing operations (Caldeira, Sabença & Braga, 2020). Table 3 lists some of the most relevant initiatives.

**Table 3.** Measures taken by CGU to combat COVID-19 in 2020

Action	Description
<b>Panel - Covid-19 related hiring</b>	The tool aimed to provide transparency and assist public managers in the procurement of goods, supplies, and services to fight COVID-19.
<b>Publication of the list of people benefited from the Emergency Financial Aid through the Transparency Portal</b>	An initiative of the CGU in partnership with the Ministry of Citizenship. It makes it possible to consult the payments to beneficiaries of the Emergency Financial Aid, classifying them into three groups, such as <i>Bolsa Família</i> Program, registered in the <i>Cadastro Único</i> (CadÚnico) and not registered in the <i>Cadastro Único</i> (ExtraCad).
<b>Publication of specific federal expenses to combat the new coronavirus on the Transparency Portal</b>	It makes it possible to consult and detail direct expenses, as well as transfers to states and municipalities in the fight against the pandemic.
<b>Supervision related to public agents who received Emergency Financial Aid in an improper manner</b>	Cross-referencing information from the benefit's database with various other databases available in the Federal Government. This action aimed to combat errors and irregularities in the payment of the Emergency Financial Aid.
<b>"Telework Tips" Campaign</b>	Initiative containing tips and guidelines for people who are working from home, due to the public health emergency caused by COVID-19.
<b>Platform Fala.BR</b>	Channel developed by CGU to receive manifestations related to COVID-19. Through the platform Fala.BR, citizens can report a lack of hospital supplies and equipment and disobedience to preventive measures.
<b>Direct actions or support to control and public security organs in special operations</b>	Monitoring the application of federal funds transferred to states and municipalities. This activity relies on the partnership with the Federal Police, Public Prosecutors' Offices, and other agencies and entities.

Source: Research data

Table 3 shows that the CGU has been very active, particularly in combating the detour and fraud of resources intended to fight the pandemic. By providing transparency and implementing tools related to government actions, as well as developing complaint channels related to Covid-19, the CGU, as an internal control body, has enabled social control by the population.

The Brazilian Federal Court, on the other hand, being an external control agency, has the function of assisting the National Congress in the mission of monitoring the country's budgetary and financial execution, in addition to contributing to the improvement of the Public Administration for the benefit of society. As far as its competencies are concerned, its list of attributions is broad, being expressed in the Federal Constitution (articles 33, paragraph 2, 70, 71, 72, paragraph 1, 74, paragraph 2, and 161, sole paragraph) and in other specific laws, such as the Complementary Law n. 101/2000 (Fiscal Responsibility Law), Law n. 8.666/1993 (Tenders and Contracts) and the Budget Guidelines Law (Brazil, 2021b).

Moreover, the contributions of the Brazilian Federal Court of Accounts, in line with the other Brazilian audit courts (Mendonça *et al.*, 2020), were decisive to combat the mismanagement of public resources and avoid mismatches and possible excesses of government entities in the context of the pandemic. Table 4, thus, lists the list of initiatives implemented by the Brazilian Federal Court of Accounts (TCU) as a response to the health crisis.

**Table 4.** TCU actions carried out in the context of the pandemic

Action	Description
<b>Coopera - Special Program of Action to Combat the Covid-19 Crisis</b>	Hot site, which gathers all TCU initiatives related to the use of public resources by government agencies and entities in the fight against coronavirus.
<b>Coopera's panel - Processes related to Covid-19</b>	It gathers information about the processes in progress at the TCU regarding COVID-19. It allows you to consult the processes by theme, reporting minister, technical unit, or jurisdiction (organs and entities).
<b>Panel monitoring employment and income preservation actions</b>	It presents the actions being taken with the implementation of the Special Plan to Follow-up Actions to Combat COVID-19 (TCU's Coopera Program) in the areas of Labor, Assistance, Social Security, and Tax Management.

Action	Description
<b>Recommendations guide for emergency hiring due to COVID-19</b>	TCU and NGO Transparency International launch a booklet for federal, state and municipal public managers. The document offers practical information so that public agents, during the crisis, can conduct the administration of public resources properly.
<b>COVID-19 Challenges</b>	TCU's support to the initiative of the National School of Public Administration (ENAP). By awarding prizes to the best works, the action encourages society to seek solutions to combat the new coronavirus. The challenges focused on the areas of health, economy, social impact, and technology.
<b>Telepresencial sessions, with live broadcast on YouTube</b>	The TCU's 1st and 2nd Chambers and Plenary began to judge and assess cases under its jurisdiction through telepresence sessions.
<b>Publication of a compendium of TCU decisions on emergency situations</b>	The Jurisprudential Survey brings a collection of TCU decisions that can guide the actions of managers in the various spheres of government (federal, state, and municipal) in facing the emergency arising from COVID-19.
<b>Supervision and monitoring actions</b>	<ul style="list-style-type: none"> <li>• TCU determines the return of COVID-19 emergency financial aid received by military personnel.</li> <li>• TCU analyzes fiscal measures to fight COVID-19.</li> <li>• TCU verifies evidence of improper emergency financial aid to more than 620,000 people.</li> <li>• TCU evaluates the governance of the Ministry of Health in the fight against the pandemic.</li> <li>• TCU monitors actions related to basic education during the pandemic.</li> <li>• TCU determines the Civil House to elaborate a plan of immunization for Brazil.</li> <li>• TCU provides a list of candidates to the 2020 elections who received emergency financial aid.</li> <li>• TCU audit points out flaws in the control of emergency financial aid.</li> <li>• TCU monitoring avoids the delay of the Emergency Financial Aid in December 2020.</li> </ul>

Source: Research data

Like the Office of the Comptroller General (CGU), the Brazilian Federal Court of Accounts (TCU), within its sphere of competence, has shown an active role as an agency of external governmental control. Its work has resulted in the publication of primers/guides/collections, reflecting its pedagogical and guiding role. In the same line, it is listed the development of informative panels, with emphasis on the benefits in the areas of labor and social assistance, considering that it is an initiative of the federal government of high social impact and the large volume of resources involved. Therefore, it is susceptible to deviations and fraud.

Moreover, the Brazilian Federal Court of Accounts (TCU)'s inspection and monitoring actions were fundamental to investigate, for example, cases of undue receipt of emergency aid, including by candidates for the 2020 elections. This and other interventions of the Eminent Court, shown in Table 4, have enabled society to monitor the management of resources allocated to combat the crisis, as well as the treatment given to cases of interference, deviations, and fraud in this context.

## 4.2 Social control exercised by organized civil society

This topic describes, from the point of view of social control, how the organized civil society acted in the fight against the pandemic. To this end, the initiatives of three non-governmental organizations are presented in separate sections. The first is the Brazilian Social Observatory (BSO), then Transparency Brazil, and finally Transparency International.

### 4.2.1 Brazilian Social Observatory (BSO)

Operating as a legal entity, in the form of an association, the BSO defines itself as a democratic and non-partisan space to contribute to transparency and quality in the application of public resources. The BSO brings together entrepreneurs, professionals, professors, students, civil servants (except those within the sphere of

action of the specific observatory), and other citizens who voluntarily have an interest in collaborating (Brazilian Social Observatory, 2021).

According to data extracted from the entity's website, the BSO is present in 145 cities in 17 Brazilian states. According to the last data update (December 2019), more than 3,500 volunteers are working in the Social Observatories spread throughout Brazil, which, between 2013 and 2019, have already contributed to a saving of more than R\$ 4 billion to municipal public coffers.

In order to continuously monitor and control the management of public resources, the BSO makes available on its website tools such as the Public Management Indicators Management System (SINGEP), which allows queries to municipal indices in the areas of health, education, security, economy, among others. The MonitLegis, which monitors councilors' expenses and absences, is also worth mentioning. Finally, the project *Observador Mirim* (Junior Observer) is mentioned, which encourages children to become citizens and exercise social control.

In the context of the pandemic, the most recurrent news on its electronic page was related to the limitations, outdatedness, or weaknesses in the municipal transparency portals. The manifestations expressed by the BSO called the attention of local governments to the difficulties of municipal observatories in monitoring procurement and emergency hiring.

Other highlights include monitoring visits to resources allocated to hospitals (Santa Casa de Araçatuba/SP); preparation of newsletters (Arapongas/PR); development of an electronic platform related to procurement processes to fight the Coronavirus (BSO - Santa Catarina and Santa Catarina Interfederative Consortium - CINCATARINA); and participation in the preparation of a document<sup>1</sup> to fight corruption in the perspective of resources allocated to the pandemic (a partnership of the Social Observatory of Palmas with other control agencies).

<sup>1</sup> Document prepared by the Tocantins Forum for the Combat against Corruption (FOCCO/TO), which takes into consideration the situations already found by the control agencies in various municipalities at the time of analysis of the resources allocated to combat the pandemic. Participating in FOCCO/TO are the Social Observatory of Palmas, the

Public Prosecutor's Office of Tocantins, the Public Ministry of Accounts, the Federal Public Prosecutor's Office, the State Comptroller's Office, the CGU, the Office of the Solicitor General of the Union, the TCU, the State Audit Court, the Court of Justice, the Federal Police and the Civil Police.



#### 4.2.2 Transparency Brazil

Transparency Brazil is an NGO that fights corruption. It was founded in April 2000 by a group of individuals and non-governmental entities. As a representative of organized civil society, this NGO is part of the Transparency Council of the Office of the Comptroller General of the Union, the Federal Senate, and the government of the State of São Paulo (Transparency Brazil, 2021).

In consultation with the entity's website, it was possible to see that Transparency Brazil has several active projects, among which is *Tá de Pé*, whose objective is to encourage the population to inspect the works of schools and daycare centers financed by the Federal Government. This project is composed by the *Tá de Pé Merenda*, which monitors public school bidding and food contracts; the *Achados e Perdidos* (Lost and Found), which gathers citizen requests and responses from the public administration made via the Access to Information Law; the *Transparência Algorítmica* (Transparency Algorithmic) (partnership with the CGU and the Ministry of Science, Technology, and Innovations), which monitors the use of algorithms by the Federal Government; the *Projeto Meritíssimos*, which provides indicators on the performance of Supreme Court justices between 1997 and 2015; and the *Obra Transparente* (Transparent Work) - a partnership with the BSO, the CGU, and the Council of Architecture and Urbanism of Santa Catarina - which aims to increase the transparency and accountability of unfinished public works.

On the scope of the pandemic, it is possible to mention the platform *Tá de Pé Compras Emergenciais*, which verifies the bids for the purchase of essential items in the fight against COVID-19, comparing the prices paid by the municipalities of the State of Rio Grande do Sul. In partnership with other organizations, it is worth mentioning the Citizen Inspection Guide, *hot site*<sup>2</sup>, created to help citizens monitor public spending associated with the fight against the pandemic.

It is also important to highlight the interventions of the entity regarding the opacity in the disclosure of information on the dissemination of COVID-19 in the country and on the actions of

the federal government concerning the health crisis. Two of the initiatives carried out in partnership with other organizations influenced the decisions of the Supreme Court, which are: Public Note against the Provisional Measure (MP) n. 928/2020, which suspended the deadlines for meeting information requests determined by the Access to Information Law and the Open Letter "Opacity costs lives", against the removal from the official portal of data on cases and deaths by COVID-19, in Brazil, in June 2020. Lastly, a Technical Note reporting the main transparency problems of the Ministry of Health (outdated data and lack of press conferences), which was presented to the control agencies and the press (Transparency Brazil, 2020).

#### 4.2.3 Transparency International (TI)

Transparency International is an anti-corruption non-governmental organization that is present in more than 100 countries, with its central base in Berlin, Germany. TI works to support and mobilize civil society to produce knowledge and raise awareness of companies and governments to adopt global best practices of transparency and integrity (Transparency International, 2021a).

Regarding the pandemic, among the documents and tools produced, the *Contratações Públicas em Estados de Emergência* report stands out. The document, prepared in partnership with Latin American TIs, indicates the minimum elements to be considered by governments to reduce the risks of corruption and misuse of extraordinary resources (Transparency International, 2020a). Another publication concerns the Primer of Recommendations for Transparency in Emergency Contracts, prepared in partnership with the Brazilian Federal Court of Accounts (TCU) (mentioned in Chart 4 of this study).

In terms of tools, it is important to mention the Transparency Ranking in the Fight against COVID-19, developed from the transparency portals of the states, Federal District, capitals, and the Brazilian federal government. Based on a scale of 0 to 100, the federal entities were classified according to the transparency with which they

<sup>2</sup> Available in: <https://frenteparlamentarods.github.io/guiafiscalizacaocidad/a/>.

dispose of information on emergency contracting, donations, economic stimulus measures, and social protection in the country. Those that come closest to the maximum score are considered the most transparent.

It is also worth mentioning the Corruption Perception Index (CPI), which since 1995 has evaluated corruption in 180 countries and territories. In the year 2020, Brazil ranked 94th, with 38 points, falling behind neighboring nations such as Uruguay (21st), Chile (25th), and Argentina (78th) (Transparency International, 2021b). The position is considered "bad" as the indicator assigns scores on a scale between 0 (when the country is perceived as highly corrupt) and 100 (when the country is perceived as very honest).

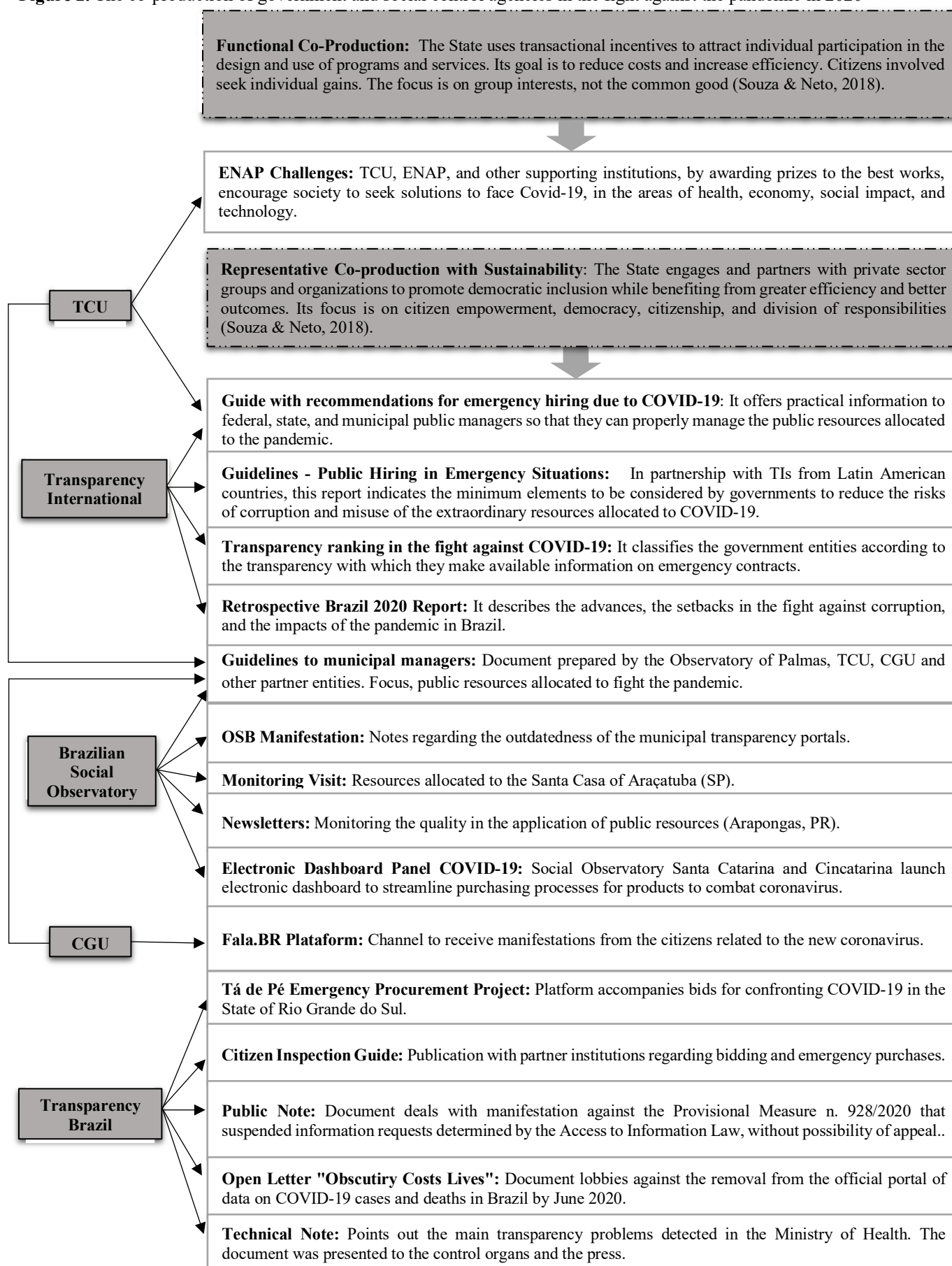
In the report, *Retrospectiva Brasil 2020*, Transparency International Brazil (2021) explains that in addition to political interference on control agencies, the pandemic also imposed its weight on the fight against corruption and, consequently, on the country's CPI results. Among the COVID-19-related situations that had an impact on Brazil's CPI score are the corruption cases involving emergency

resources and the reduction of public debate and institutional and social control of official acts, which, due to delays in responding to the Access to Information Act, remote sessions, and special regimes for legislative procedures, further distanced society from public decisions. However, as a positive point, it is possible to highlight the work of the crime control and repression agencies that could identify fraud and corruption schemes associated with the resources to combat the coronavirus (Transparency International Brazil, 2021).

#### 4.3 Co-production of government and social control agencies

Based on sections 4.1 and 4.2, this topic will present the co-productions made by the selected sample entities. In this sense, Figure 2 brings together the coproducing control entities, the actions/initiatives undertaken, in addition to the characteristics and types of co-production.

**Figure 2.** The co-production of government and social control agencies in the fight against the pandemic in 2020



Source: Created by the authors of this article (2021)

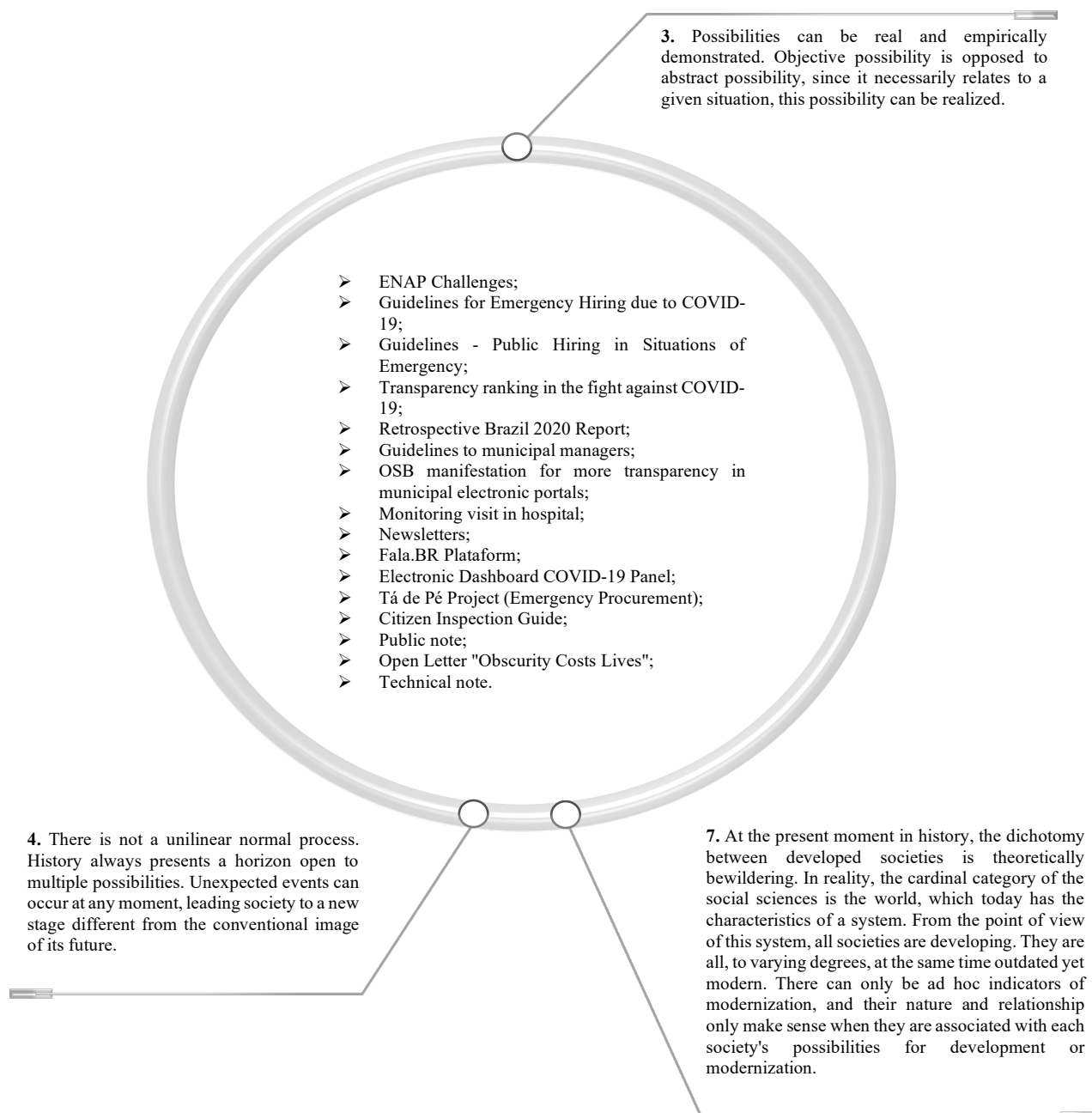
The evidence presented in Figure 2 showed that the manifestations expressed by the organizations studied met the requirements related to co-production. The ENAP Challenges initiative, supported by the Brazilian Federal Court of Accounts (TCU), for example, was identical to the functional co-production model. In this case, the population participated in the search for solutions to face COVID-19; however, the interest in co-producing was individual and financial, as it involved cash awards to the best works presented, thus converging with the characteristics of this type of co-production.

Most of the actions undertaken by the organizations studied, however, demonstrated greater affinity with the model of representative co-production with sustainability. In this model, the engagement of organized civil society, in particular, emphasized the promotion of the common good rather than the individual good. Besides co-producing public goods/services, the initiatives of the entities analyzed focused on the general welfare, transparency, compliance with legal regulations, and the appropriate allocation of public resources allocated to face the pandemic.

The services they co-produced sought to empower the population to exercise social control, either by publishing news, newsletters, information panels, or by implementing monitoring tools, complaint/information request platforms, among others. In parallel, these NGOs have developed guides/booklets/documents containing recommendations, transparency ranking, technical note, and public note. These measures are intended to pressure and encourage public managers to develop their competencies with more responsiveness, transparency, integrity, and efficiency towards the population.

Additionally, it is intended to identify the existence of a correlation between the co-produced actions (Figure 2) and the seven foundations of Theory P (Figure 1) presented in topic 2.2 of this study. With no intention of exhausting the possible inferences that can be drawn from the theory postulated by Guerreiro Ramos, it is intended to extract, among its assumptions, the ones that meet the objectives pursued by this work the most. In this sense, Figure 3 illustrates the actions co-produced by the organizations studied with the concepts taken from Theory P, as follows.

**Figure 3.** Relationship between co-productions and Theory P



Source: Created by the authors of this article (2021)

Considering Figure 3, it can be observed that items 3, 4, and 7 of Theory P were those that showed greater proximity to the co-productions analyzed. In this sense, the emergency and highly complex scenario triggered by COVID-19 denoted convergence with item 4 of Theory P, since it advocates that there is no unilinear process, and unexpected events may occur at any moment, leading society to a new stage different from the preconceived image of its future.

Likewise, the pandemic showed that not even the most developed nations in the world were prepared to face the perverse impacts of the new

coronavirus. Consequently, this fact found alignment with item 7 of P-Theory, which postulates that the understanding of developed societies is theoretically bewildering. This means that the world today needs to assume characteristics of a system, as all societies are developing and are, at the same time and to different degrees, backward and modern.

On the other hand, item 3 of the aforementioned theory indicates that objective possibilities can be real and empirically demonstrated. In this study, they materialized through the co-productions examined. Concerning

NGOs (BSO, Transparency International, and Transparency Brazil), it was evident through their actions that they fulfill their political and social role, thus converging to build the common good. On the other hand, the government control organs, the Office of the Comptroller General (CGU) and the Brazilian Federal Court of Accounts (TCU), by demonstrating dysfunctions, distortions, and misappropriation of public money, exercised a social role in defense of the Brazilian citizens, besides their institutional functions.

Complementarily, it was verified that the State, in the figure of the control agencies investigated, by bringing segments of civil society into its sphere of action to improve its managerial practices, signaled, under this dimension, indicative elements of co-production and, therefore, also revealed itself as a true objective possibility, according to the meaning of Guerreiro Ramos

## 5 Conclusion

Moments of crisis and situations with emergency characteristics, similar to the magnitude of COVID-19, put the implementation of public policies to the test, either by destabilizing the relationship of forces between social actors or by testing the systems and bureaucracies established to meet the demands of the population (Machado *et al.*, 2020). Thus, the pandemic promoted a moment of rupture, imposing on institutions, especially governmental ones, modifications and adaptations to address the issues that need greater attention and priority.

Concerning the State control agencies, the current scenario has also demanded a series of adjustments. Besides fulfilling their traditional inspection, control, and monitoring attributions, foreseen in the country's regulatory framework, these control agencies have found the need to make their pedagogical role more recurrent, to guide government agents to fulfill their roles in the context of the pandemic, however, without breaking the law.

Moreover, in 2020, the control entities analyzed here (governmental/social) co-produced several initiatives, individually or in partnership with other institutions. In this sense, the responses given to society regarding the fight against COVID-19 were quite positive. On the one hand, the control exercised by organized civil society has

emerged, presenting consultation tools, newsletters, demonstrations, and pressure for more transparency in the State's actions. On the other hand, there is the Office of the Comptroller General (CGU) and the Brazilian Federal Court of Accounts (TCU) deflagrating inspection actions, establishing guidelines for government agents, and bringing society closer through their activities.

In short, this set of convergent premises denoted adherence in the actions of state and social control, which enabled, consequently, the co-production of public services. Moreover, each of these institutions, with a series of projects related to the control of public accounts, opened a window of opportunity, breaking the chain of bureaucracy and allowing the participation of civil society in the deliberation of public choices.

Therefore, it is added that the objective proposed by this study was achieved. The critical analysis of the actions carried out by the institutions addressed identified that the requirements of co-production were met for two of its models, namely: Functional and Representative with Sustainability. On the other hand, as a theoretical contribution, the research presented, in the context of confronting COVID-19, the co-production of public services from the perspective of social and state control entities. In parallel, it was demonstrated that Alberto Guerreiro Ramos's Theory of Possibilities, even though it was elaborated in another context, proves to be quite current and applicable to the Brazilian reality.

It should also be emphasized that this study presented limitations. Considering the representativeness of the agencies analyzed and the amount of information contained in their official websites, the objective of the research was not to cover all the actions undertaken by them. In this sense, this work presented a sample list of the initiatives that are more adherent to the theme studied, and therefore some projects may not have been contemplated by the proposed survey. Thus, as an agenda for future research, it is recommended to expand both the range of control actions analyzed and the number of entities participating in the sample. One can also work on the financial impact provided by the co-production of the social/state control entities during the COVID-19 crisis. Another analysis refers to the performance of control entities in other countries, identifying the relevant goods/services co-produced by them in the current situation of the global health crisis, as well

as the development of a tool that allows the replication of this study in other institutions, countries, and territories.

## 7 References

- Allebrandt, S. L. (2016). Gestão social e deliberação em espaços públicos: categorias e indicadores para monitoramento e análise. In F. G. Tenório (Org.), *Cidadania, território e atores sociais* (1a. ed., Vol. 4, pp. 19-60). Rio de Janeiro, RJ: FGV Editora.
- Andion, C. (2020). Atuação da sociedade civil no enfrentamento dos efeitos da COVID-19 no Brasil. *Revista de Administração Pública*, 54(4), 936-951. Recuperado de <https://doi.org/10.1590/0034-761220200199>
- Bardin, L. (2016). *Análise de conteúdo*. São Paulo, SP: Edições 70.
- Brasil. *Constituição da República Federativa do Brasil de 1988*. (1988). Brasília, DF. Recuperado em 19 fevereiro, 2021, de [http://www.planalto.gov.br/ccivil\\_03/constituicao/constituicao.htm](http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm)
- Brasil. Controladoria Geral da União – CGU. 2021a. Recuperado em 19 fevereiro, 2021, de <https://www.gov.br/cgu/pt-br>
- Brasil. Tribunal de Contas da União – TCU. 2021b. Recuperado em 19 fevereiro, 2021, de <https://portal.tcu.gov.br/inicio/>
- Caldeira, D. M., Sabença, S. Z. & Braga, M. V. de A. (2020). Inovação em accountability no combate à Covid-19 no Brasil: uma análise empírica do Controle Interno. *Revista da CGU*, 12(22), 298-312. Recuperado de <https://doi.org/10.36428/revistadacgu.v12i22.325>
- Cheng, Y., Yu, J., Shen, Y. & Huang, B. (2020). Coproducing Responses to COVID-19 with Community-Based Organizations: Lessons from Zhejiang Province, China. *Public Admin Rev*, 80(5), 866-873. Recuperado de <https://doi.org/10.1111/puar.13244>
- Christensen, T. & Lægreid, P. (2020). Balancing Governance Capacity and Legitimacy: How the Norwegian Government Handled the COVID-19 Crisis as a High Performer. *Public Admin Rev*, 80(5), 774-779. Recuperado de <https://doi.org/10.1111/puar.13241>
- Coelho, F. de S., Correa, V., Lisboa, R. L. & Resch, S. (2020). A 'casa das máquinas' da administração pública na luta contra o COVID-19. *Revista de Administração Pública*, 54(4), 839-859
- Recuperado de <https://doi.org/10.1590/0034-761220200382x>
- Corrêa, V., Passador, C. S. (2019). *O Campo do conhecimento em administração pública: uma análise a partir do olhar do Guerreiro Ramos*. Brasília: Enap.
- Cravo, T. A. Da imprevisibilidade momentânea à previsibilidade estrutural. (2020, 17 de junho). In H. Carreiras *et al.* (Ed.), *COVID-19 e segurança humana* (Especial Pandemia, pp. 8-9). Portugal: IDN. Recuperado de <https://www.idn.gov.pt/publicacoes/idnbrie/Paginas/idnbrie17junho2020.aspx>
- Gazley, B., Lafontant, C. & Cheng, Y. D. (2020). Does Coproduction of Public Services Support Government's Social Equity Goals? The Case of U.S. State Parks. *Public Admin Rev*, 80(3), 349-359. Recuperado de <https://doi.org/10.1111/puar.13161>
- Goodwin, G. The problem and promise of coproduction: Politics, history, and autonomy. (2019). *World Development*, (Vol. 122), 501-513. Recuperado de <https://doi.org/10.1016/j.worlddev.2019.06.007>
- Guimarães, T. de A. (1981). A Nova ciência das organizações: uma reconceitualização da riqueza das nações. *RAE-Revista de Administração de Empresas*, 21(3). Recuperado de <https://doi.org/10.1590/S0034-75901981000300010>
- Lapão, L.V. (2020, 13 de maio). Por que falhamos tanto na coordenação, se é um pilar da gestão de crises? In H. Carreiras *et al.* (Ed.), *COVID-19 e gestão de crises: um novo paradigma?* (Especial Pandemia, pp. 7-8). Portugal: IDN. Recuperado de <https://www.idn.gov.pt/publicacoes/idnbrie/Paginas/IDN-Brief-13-maio-2020.aspx>
- Machado, L. N., Ortiz, M. S. P., Silva, T. A. B. da & Bellix, L. (2020). Restrições ao direito de acesso à informação em contextos emergenciais: análise dos efeitos da Covid-19 nos governos subnacionais. *Revista da CGU*, 12(22), 246-259. Recuperado de <https://doi.org/10.36428/revistadacgu.v12i22.361>
- Mcconnell, A. & Drennan, L. (2006). Mission Impossible? Planning and Preparing for Crisis. *Journal of Contingencies and Crisis Management*, 14(2), 59-70. Recuperado de <https://doi.org/10.1111/j.1468-5973.2006.00482.x>
- Mendonça, R. L., Rezende, S. R., Rodrigues, L. M., Araújo Júnior, J. G. de, Paula, P. P. de &

Lima, D. V. de. (2020, julho). *Atuação dos Tribunais de Contas nas Ações de Enfrentamento à Pandemia da Covid-19*. XX USP International Conference in Accounting, São Paulo, SP. Recuperado em 8 fevereiro, 2021, de [https://www.researchgate.net/publication/344073685\\_Atuação\\_dos\\_Tribunais\\_de\\_Contas\\_nas\\_Ações\\_de\\_Enfrentamento\\_a\\_Pandemia\\_da\\_Covid-19](https://www.researchgate.net/publication/344073685_Atuação_dos_Tribunais_de_Contas_nas_Ações_de_Enfrentamento_a_Pandemia_da_Covid-19)

Moretto Neto, L., Salm, V. M. & Souza, V. B. (2014). A Coprodução dos Serviços Públicos: modelos e modos de gestão. *Revista de Ciências da Administração*, 16(39), 164-178. Recuperado de <https://doi.org/10.5007/2175-8077.2014v16n39p164>

Observatório Social do Brasil. (2021). Acesso em 12 fevereiro, 2021, de <https://osbrasil.org.br/>

Osborne, S. P. & Strokosch, K. (2013). It takes Two to Tango? Understanding the Co-production of Public Services by Integrating the Services Management and Public Administration Perspectives. *Brit of Journal Management*, 24(51), 31-47. Recuperado de <https://doi.org/10.1111/1467-8551.12010>

Paula, A. P. P. de. (2005). Administração pública brasileira entre o gerencialismo e a gestão social. *RAE-Revista de Administração de Empresas*, 45(1), 36-49. Recuperado de <http://dx.doi.org/10.1590/S0034-75902005000100005>

Paula, A. P. P. de. (2007). Guerreiro Ramos: Resgatando o Pensamento de Um sociólogo crítico das Organizações. *Organizações & Sociedade*, 14(40), 169-188. Recuperado de <http://dx.doi.org/10.1590/S1984-92302007000100010>

Pirozzi, N. (2020, 13 de maio). A new paradigm for managing crises after COVID-19. In H. Carreiras *et al.* (Ed.), *COVID-19 e gestão de crises: um novo paradigma?* (Especial Pandemia, p. 10). Portugal: IDN. Recuperado de <https://www.idn.gov.pt/pt/publicacoes/idnbrief/Paginas/IDN-Brief-13-maio-2020.aspx>

Ribeiro, F. de O., Sallaberry, J.D., Santos, E.A. dos & Tavares, G. de O. D. (2020). Ações dos Tribunais de Contas no enfrentamento dos efeitos do coronavírus. *Revista de Administração Pública*, 54(5), 1402-1416. Recuperado de <https://doi.org/10.1590/0034-761220200244>

Salm, J. F. (2014). Coprodução de bens e serviços públicos. In R. de F., Boullosa (Org.), *Dicionário para a formação em gestão social* (pp.

42-44). Salvador: CIAGS/UFBA.

Salm, J. F. & Menegasso, M. E. (2010, setembro). *Proposta de modelos para a coprodução do bem público a partir das tipologias de participação*. In anais do XXXIV Encontro da ANPAD. Rio de Janeiro, RJ: ANPAD. Recuperado em 8 fevereiro, 2021 de <http://www.anpad.org.br/admin/pdf/apb633.pdf>

Salm, J. F. (2015). Pressupostos, Fundamentos Teóricos e Legado do Curso de Mestrado em Planejamento Governamental Desenvolvido por Alberto Guerreiro Ramos. *Cadernos EBAPE.BR*, 13(Edição Especial), p. 639-656. Recuperado de <http://dx.doi.org/10.1590/1679-395147737>

Schmidt, F., Mello, J. & Cavalcante, P. (2020, abril). Coordenação governamental na crise da COVID-19: breve proposta de ação. *Radar* (n. 62, pp. 11-16). Recuperado em 12 fevereiro, 2021 de <https://www.ipea.gov.br/radar/temas/politicas-publicas/785-coordenacao-governamental-na-crise-da-covid-19-breve-proposta-de-acao#:~:text=Coordena%C3%A7%C3%A3o%20Governamental%20na%20crise%20da%20Covid%2D19%3A%20breve%20proposta%20de%20a%C3%A7%C3%A3o,-Share&text=Os%20dados%20sobre%20os%20impactos,para%20uma%20crise%20dessas%20dimens%C3%B5es>

Schmitz Junior, S., Paixão, G. J., Meller, A. J., & Moretto Neto, L. (2014). O Legado do Pensamento de Alberto Guerreiro Ramos para a Gestão Social. *Revista Gestão Organizacional*, 7(3), 47-60. Recuperado de <https://doi.org/10.22277/rgo.v7i3.1861>

Schommer, P. C., Rocha, A. C., Spaniol, E. L., Dahmer, J. & Sousa, A. D. de. (2015). Accountability, coprodução da informação e do controle: observatórios sociais e suas relações com órgãos governamentais. *Revista de Administração Pública*, 49(6), 1375-1400. Recuperado de <http://bibliotecadigital.fgv.br/ojs/index.php/rap/article/view/56590>

Souza, V.B. & Neto, L.M. A Typology of Coproduction: Emphasizing Shared Power, From Austerity to Abundance? (2018). (Critical Perspectives on International Public Sector Management, v. 6, pp. 117-139), *Emerald Publishing Limited*. Recuperado de <https://doi.org/10.1108/S2045-794420180000006006>

Teles, P. V. (2020, 17 de junho). COVID-19,



segurança humana e nações unidas: a necessidade de uma abordagem multilateral. In H. Carreiras *et al.* (Ed.), *COVID-19 e segurança humana* (Especial Pandemia, pp. 6-7). Portugal: IDN. Recuperado de <https://www.idn.gov.pt/pt/publicacoes/idnbrief/Paginas/idnbrief17junho2020.aspx>

Transparência Brasil. Relatório de Atividades 2020. (2020). *Transparência Brasil*. Recuperado em 12 fevereiro, 2021 de [https://www.transparencia.org.br/downloads/publicacoes/Relatorio\\_Atividades\\_TB\\_2020.pdf](https://www.transparencia.org.br/downloads/publicacoes/Relatorio_Atividades_TB_2020.pdf)

Transparência Brasil. (2021). Recuperado em 12 fevereiro, 2021, de <https://www.transparencia.org.br/>

Transparência Internacional. (2021a). Recuperado em 19 fevereiro, 2021, de <https://transparenciainternacional.org.br/home/desques>

Transparência Internacional. (2020a). Contrataciones Públicas en Estados de Emergencia: elementos mínimos que los gobiernos deben considerar para asegurar la integridad de las adjudicaciones que realicen durante contingencias. Recuperado em 19 fevereiro, 2021, de [https://www.transparency.org/files/application/flash/COVID\\_19\\_Public\\_procurement\\_Latin\\_America\\_ES\\_PT.pdf](https://www.transparency.org/files/application/flash/COVID_19_Public_procurement_Latin_America_ES_PT.pdf)

Transparência Internacional. Índice de Percepção da Corrupção 2020. (2021b). Recuperado em 19 fevereiro, 2021, de <https://comunidade.transparenciainternacional.org.br/ipc-indice-de-percepcao-da-corrupcao-2020>

Transparência Internacional Brasil. Retrospectiva Brasil 2020. (2021). Recuperado em 19 fevereiro, 2021, de <https://comunidade.transparenciainternacional.org.br/retrospectiva-brasil-2020>

Zwick, E., Teixeira, M. P. dos R., Pereira, J. R. & Vilas Boas, A. A. (2012). Administração pública tupiniquim: reflexões a partir da Teoria N e da Teoria P de Guerreiro Ramos. *Cadernos EBAPE.BR*, 10(2), 284-301. Recuperado de <https://doi.org/10.1590/S1679-39512012000200004>