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Stakeholder engagement and the role of institutional dimensions

Engajamento de *stakeholders* e o papel das dimensões institucionais

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“O mundo é formado não apenas pelo que já existe,
mas pelo que pode efetivamente existir”.

Milton Santos

ABSTRACT

Santos Jhunior, R. O. (2023). *Stakeholder engagement and the role of institutional dimensions.* (Tese de Doutorado). Faculdade de Economia, Administração, Contabilidade e Atuárias, Universidade de São Paulo, São Paulo.

The current business environment is increasingly complex, with organizations realizing the importance of creating effective stakeholder engagement actions that yield positive outcomes and foster sustainable development for themselves and their stakeholders. Engaging with stakeholders can benefit organizations as it can help improve their reputation and overall success. Organizational actions can have far-reaching consequences that transcend national boundaries. To comprehend the impact organizations can have on a country or a global level, it's essential to understand how the institutional characteristics of different markets can either promote or hinder their contributions towards sustainable development. This doctoral dissertation addresses the current lack of understanding regarding companies' stakeholder engagement considering varying institutional influences. Thus, by benefiting from the cross-fertilization of insights from stakeholder literature and institutional approaches, the central argument is that institutional dimensions, such as the State, Financial Markets, Social Capital, Human Capital, and Corporate Governance, play a role in stakeholder engagement behavior of companies under distinct institutional influences. The primary objective of this study is to analyze companies' stakeholder engagement practices in light of their relations with the role of national institutions. In meeting this objective, it is possible to arrange the levels of stakeholder engagement considering the influence of institutional dimensions. The study method takes two steps: qualitative research through content analysis on stakeholder engagement practices in non-financial reports of sensitive publicly traded companies following the GRI Standards, and quantitative research on institutional dimensions categorized by the Varieties of Institutional Systems framework and the stakeholder engagement practices found in the previous step using multivariate quantile regression. The findings of this research establish communications with corroborating or contrasting with some prior theoretical endeavors. The results suggest that institutional dimensions significantly influence stakeholder engagement practices in emerging and middle-income economies, highlighting the Corporate Governance and Financial Markets dimensions. This investigation theoretically contributes to the literature by better understanding the relationship between stakeholder engagement and the institutional environment. It also generates social and managerial contributions by clarifying that companies must create stakeholder engagement strategies to succeed in developing countries, considering the institutional factors that influence stakeholder relationships. In sum, this knowledge can help enhance companies' stakeholder engagement capabilities by considering the institutional systems in which they operate.

Keywords: Stakeholder Engagement; Institutional Dimensions; Content Analysis; Quantile Regression; Emerging and Middle-Income Markets.

RESUMO

Santos Jhunior, R. O. (2023). *Engajamento de stakeholders e o papel das dimensões institucionais.* (Tese de Doutorado). Faculdade de Economia, Administração, Contabilidade e Atuárias, Universidade de São Paulo, São Paulo.

O atual ambiente de negócios é cada vez mais complexo, com as organizações percebendo a importância de criar ações efetivas de engajamento de *stakeholders* que gerem resultados positivos e promovam o desenvolvimento sustentável para si e para seus grupos de interesse. O envolvimento com os *stakeholders* pode beneficiar as organizações, pois é capaz de melhorar sua reputação e seu sucesso geral. As ações organizacionais podem ter consequências de longo alcance que transcendem as fronteiras nacionais. Para compreender o impacto que as organizações podem ter em um país ou em nível global, é essencial entender como as características institucionais de diferentes mercados podem promover ou impedir suas contribuições para o desenvolvimento sustentável. Esta dissertação de doutorado aborda a atual falta de compreensão sobre o engajamento de *stakeholders* das empresas considerando as diversas influências institucionais. Assim, beneficiando-se da fertilização cruzada de reflexões da literatura de *stakeholders* e das abordagens institucionais, o argumento central é que as dimensões institucionais, como Estado, Mercados Financeiros, Capital Social, Capital Humano e Governança Corporativa, desempenham um papel no comportamento de engajamento de *stakeholders* de empresas sob distintas influências institucionais. Este estudo busca analisar as práticas de engajamento de *stakeholders* das empresas à luz de suas relações com o papel das instituições nacionais. Ao atingir esse objetivo, é possível estruturar os níveis de engajamento considerando a influência das dimensões institucionais. O método de estudo segue duas etapas: pesquisa qualitativa por meio de Análise de Conteúdo sobre práticas de engajamento em relatórios não financeiros de empresas sensíveis de capital aberto seguindo os padrões GRI e pesquisa quantitativa sobre dimensões institucionais categorizadas pelo modelo das Variedades de Sistemas Institucionais e as práticas de engajamento usando a técnica multivariada da Regressão Quantílica. Os achados desta pesquisa estabelecem comunicações que corroboram ou contrastam com alguns esforços teóricos anteriores. Os resultados sugerem que as dimensões institucionais influenciam significativamente as práticas de engajamento de *stakeholders* em economias emergentes e de renda média, com destaque para as dimensões Governança Corporativa e Mercados Financeiros. Esta investigação contribui teoricamente para a literatura ao compreender melhor a relação entre o engajamento de *stakeholders* e o ambiente institucional. Também gera contribuições sociais e gerenciais ao esclarecer que as empresas devem criar estratégias de engajamento de *stakeholders* para obter sucesso em países em desenvolvimento, considerando os fatores institucionais que influenciam as relações com os grupos de interesse. Em suma, esse conhecimento pode ajudar a aprimorar a capacidade de engajamento das empresas, considerando os sistemas institucionais em que operam.

Palavras-chave: Engajamento de Stakeholders; Dimensões Institucionais; Análise de Conteúdo; Regressão Quantílica; Mercados Emergentes e de Renda Média.

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1 INTRODUCTION

Stakeholder theory suggests that in order to be successful in the long run, companies must look beyond their shareholders and meet the needs and goals of other stakeholders (Freeman, 1984). From this perspective, the literature on stakeholder theory has developed interpretations that have gathered prominence over time, such as the idea of managing for stakeholders (Freeman, Harrison & Wicks, 2007). This approach involves recognizing the diverse interests of stakeholders and accommodating them through key decision-making processes, leading to engagement, interaction, and value creation with stakeholders (Freeman, 2017). As a result, companies that adopt the managing for stakeholders' approach create and distribute value across a broader range of groups than just shareholders, leading to improved engagement, performance and socio-environmental responsibility (Harrison, Bosse & Phillips, 2010; Goes, Fatima, Santos Jhunior & Boaventura, 2023).

In this regard, engaging with stakeholders can benefit organizations as it can help improve their human capital, reputation, and culture. According to the literature, this can lead to increased innovation and overall success (Surroca, Tribó & Waddock, 2010; Sulkowsky, Edwards & Freeman, 2018). Such potential benefits have been attracting interest and generating several discussions and possibilities for reflection within and beyond stakeholder theory.

Business environments have become increasingly complex, prompting organizations to create effective engagement strategies that yield positive outcomes and foster sustainable development for themselves and their stakeholders (Stocker, Arruda, Mascena & Boaventura, 2020). Studies have highlighted the importance of prioritizing sustainability in stakeholder engagement to achieve better results. These strategies have the potential to not only drive competitive advantage but also facilitate value creation for society and stakeholders (Sulkowski et al., 2018; Stocker et al., 2020).

Over the last decades, stakeholder theory has fomented interest in both academic and managerial spheres. However, unresolved and unexplored aspects still require further theoretical reflection and empirical application (Bridoux & Stoelhorst, 2022). Moreover, among different perspectives, recent research supports the notion that there is still much to explore when it comes to understanding the impact of national institutional factors on the implementation of stakeholder engagement strategies (Ortas, Gallego-Alvarez & Alvarez, 2019; Stocker et al., 2020; Lopez-Concepción, Gil-Lacruz & Saz-Gil, 2021).

Organizational actions can have far-reaching consequences that transcend national boundaries. To comprehend the impact organizations can have on a country or a global level, it's crucial to understand how the institutional characteristics of different markets can either promote or hinder their contributions towards sustainable development and social well-being.

The impact of institutional factors on decisions, behavior, and corporate interactions in different countries has been extensively studied in the new institutionalism literature (Ortas et al., 2019; Ntim & Soobaroyen, 2013; Williams & Aguilera, 2008; Rodrigues & Craig, 2007). This body of research aims to illustrate how differences in institutional constraints across nations affect businesses' internal structures, processes, decisions, relationships, and performance. From a broad perspective, we see institutional theory as a valuable lens for comprehending and clarifying how the various features of initiatives that aim at managing for stakeholders, sustainability, and corporate social responsibility take different characteristics in multiple national contexts (Ortas et al., 2019; Brammer, Jackson & Matten, 2012).

Understanding how companies interact with stakeholders in different market situations is crucial for successful engagement strategies. Each market has unique economic, social, and political factors that impact stakeholder relationships (Ortas et al., 2019; Aguilera et al., 2021). Examining these specifics can provide valuable insights for effective stakeholder management.

In an attempt to develop a dialogue with different stakeholders, organizations worldwide have been publishing sustainability-like reports to communicate their corporate responsibility strategies. In this type of non-financial report, organizations can disseminate information about strategies considering the interests of the company, stakeholders, and society (Hourneaux Jr, Galleli, Gallaerdo-Vazquez & Sánchez-Hernández, 2017). In other words, it is a way of revealing stakeholder relationship strategies by aligning them with their material themes (Moroney & Trotman, 2016).

Companies must satisfy a complex set of stakeholder expectations; hence, one key challenge for business practitioners is understanding and managing such expectations and demands beyond financial needs (Grushina, 2017). Consequently, non-financial reports have evolved into a vital tool for companies around the world to communicate their strategies and actions to stakeholders to develop strong communication and connections and engage them in organizational activities (Grushina, 2017). Hence, this document type holds validity and acknowledgment in the literature, serving as a source to comprehend stakeholder engagement (Stocker et al., 2020).

1.1 Research Problem and Gap

Long-standing stakeholder theory (Freeman et al., 2007; Harrison, Bosse & Phillips, 2010; Bridoux & Stoelhorst, 2016; Jones, Harrison, & Felps, 2018) states that mutually beneficial relationships between companies and their stakeholders lead to increased profitability and value creation. Furthermore, according to the literature on stakeholder engagement, companies can improve their overall performance by fostering more cooperative relationships with their stakeholders (Ortas et al., 2019) through various engagement strategies, such as communication, partnership, and involvement (Stocker et al., 2020).

On the other hand, recent studies debating novel paths for stakeholder theory attempt to broaden research choices by considering arguments that go beyond the relationship between stakeholder management and market performance (Bridoux & Stoelhorst, 2022). In other words, there is incentive and opportunity in the theory's state of the art to unveil and empirically assess the consequences of company-stakeholder interactions with outcomes that are not always tied to financial performance, as observed in the mainstream of stakeholder theory. The quest to comprehend the relationships between concepts from stakeholder theory and other theoretical or empirical perspectives while taking into account different forms of influence and impact, therefore, nurtures a research gap. In this regard, benefiting from the cross-fertilization of insights from stakeholder literature and institutional approaches, we believe this research enhances the comprehension of companies' stakeholder engagement under a variety of institutional influences.

Considering the diversity of institutional contexts and their respective characteristics, understanding the relationship between companies and stakeholders in several countries becomes challenging. In this sense, as mentioned, disclosing non-necessarily financial information, such as those related to sustainability, CSR, or stakeholder engagement strategies, presents an interesting data source for developing studies. In other words, sustainability or non-financial reports can be a way of observing the actions of organizations in different countries, serving to understand the behavior of companies and their relationships with stakeholders in their political, legal, economic, and social environments. We argue that understanding how engagement relationships between companies and stakeholders are configured in different institutional contexts makes a relevant contribution to the literature, both from theoretical and empirical perspectives.

Based on the above arguments, this dissertation attempts to address the issue regarding the current lack of understanding about companies' stakeholder engagement under varying institutional influences. To this end, the study will analyze non-financial reports classifying the stakeholder engagement levels (Stocker et al., 2020) in countries categorized by the Varieties of Institutional Systems framework (Fainshmidt, Judge, Aguilera & Smith, 2018). Building on prior literature, we contend that a critical aspect of this research is the congruence between strategy and context (Gupta, Crilly & Greckhamer, 2020). Accordingly, this dissertation proposes an arrangement of stakeholder engagement based on two theoretical assumptions: first, that institutional contexts create directions, rules, and norms that can shape stakeholder engagement, and second, that these institutional directions offer opportunities for different strategies in a variety of contexts. Combining these assumptions is crucial because businesses can only establish positive relationships and deliver superior performance when they comprehend the competitive environment in which they operate and when they can fulfill the needs of their stakeholders (Gupta et al., 2020; Zhao, Fisher, Lounsbury & Miller, 2017).

1.2 Research Objectives

To address the research issues presented above, the primary objective of this study is to analyze companies' stakeholder engagement actions considering their relations with the role of national institutions. In meeting this objective, it will be possible to arrange the levels of stakeholder engagement considering the dimensions of institutional influence of different countries, organized in the varieties of institutional systems. Recent literature states that engaging with stakeholders is complex and context-specific (Freeman et al., 2017; Kujala, Sachs, Leinonen, Heikkinen, & Laude, 2022). From this perspective, we follow Kujala et al. (2022), arguing that more research is needed to understand stakeholder engagement in diverse geographical and organizational contexts beyond North America and Western Europe, regions overrepresented in the literature.

Thus, in an effort to address contexts that have been relatively overlooked in the stakeholder engagement literature, this dissertation will investigate companies from emerging and middle-income markets, according to the IMF (2022). These markets play a significant role in the global economy and trade, as evidenced by their participation in influential groups such as BRICS and G20. Even nations not typically considered emerging, such as Botswana, Nigeria, and Vietnam, have garnered international attention due to their anticipated economic growth in the near future, as reported by the IMF in 2022. Furthermore, forecasts for the long term indicate that developing and emerging countries are expected to contribute to nearly 60% of the world's Gross Domestic Product (GDP) by 2030 (OECD, 2010). Finally, as for the investigated companies, this study concentrates on sensitive sectors, which are often subjected to political pressure and moral debates and have a significant potential for socio-environmental impact (Garcia, Mendes-da-Silva & Orsato, 2017). The choice of these sectors was based on the availability of published reports worldwide and the necessity to comprehend the behavior of industries that can significantly affect society and the environment.

In the wake of understanding the effects of different institutional dimensions related to the literature on varieties of capitalism – or institutional systems – in stakeholder engagement actions, an extensive literature review is necessary to systematize the efforts of previous studies. Furthermore, an overview of the primary theoretical foundations used in this study is provided to highlight the connections established in the literature that led to the development of this research.

Considering the above, the following specific objectives are observed:

1. To investigate the scientific production on stakeholder engagement and varieties of institutional systems.
2. To analyze the stakeholder engagement levels in non-financial reports of companies from countries categorized in the varieties of institutional systems;
3. To examine the levels of stakeholder engagement of the analyzed companies relating to the influences of the institutional dimensions observed.

1.3 Research Contributions and Justifications

As noted earlier, research on stakeholder theory and its various possibilities for analysis are not recent. Even so, this field shows increasing development with new reflections expanding or challenging already established approaches. From this perspective, this study aims to elucidate stakeholder engagement by generating better awareness of the role of organizations in their contexts of activity, which is associated with new research trends for stakeholder theory (Bridoux & Stoelhorst, 2022).

This investigation seeks to theoretically contribute to stakeholder theory by providing a better understanding of the relationship between stakeholder engagement and the institutional environment. It also aims to generate social and managerial contributions by clarifying which engagement actions are present in different national contexts. This knowledge can help enhance companies' stakeholder engagement capabilities by considering the institutional systems in which they operate.

Organizations such as the World Economic Forum (WEF) have recommended studies of this nature, which in 2020 launched the Davos Manifesto, strengthening the international positioning of stakeholder theory by stating that the purpose of business is to engage all its stakeholders in shared and sustained value creation. Additionally, the United Nations (UN) supports research that aligns with the conceptual framework of this dissertation. The Sustainable Development Goals (SDGs) address the interplay of various stakeholders in resolving conflicts and addressing social, economic, and environmental concerns. This emphasizes the potential societal impact of the research, in addition to the scientific implications already mentioned.

High-quality stakeholder engagement practices have emerged as an essential tool for companies to address managing and societal challenges and contribute to sustainable development. Such practices have the potential, for instance, to reduce income inequality and promote social equity by improving working conditions and creating opportunities for disadvantaged stakeholders. Given organizations' significant role in society, it is essential to explore the potential impact of their engagement with stakeholders. This research aims to contribute to this exploration by investigating how stakeholder engagement behavior varies in different institutional settings. Through this research, practical implications can be identified to help organizations better understand the importance of effective stakeholder engagement in developing economies. This is the primary motivation for carrying out this research considering the potential impacts of organizations on society as a whole.

1.4 Doctoral Dissertation Structure

The doctoral dissertation is divided into seven chapters, each covering a specific topic. Chapter 1 serves as the introduction, which highlights the research problem, literature gap, research objectives, potential contributions, and justifications for the investigation.

In Chapter 2, we explore the theoretical basis of the study. We delve into the core principles and theoretical frameworks of stakeholder theory, along with a thorough analysis of the stakeholder engagement concept. Furthermore, this chapter offers an overview of institutional concepts, such as Varieties of Capitalism from a wide perspective and Varieties of Institutional Systems from a particular viewpoint. Lastly, the Theoretical Background section concludes by briefly discussing the study's pathways and interrelationships, based on the primary references utilized in this research. Moving forward, Chapter 3 outlines the hypothesis development for the study.

Chapter 4 details the research methodology, outlining the variables utilized in the study, how they were operationalized and measured through content and multivariate analysis, the description of the sample, and the methods for analyzing the data. Chapter 5 provides the study's results, including statistical analyses and the outcome of the hypotheses tested. Complementary analysis models are also provided to deepen the empirical reflections.

Chapter 6 delves into the discussion of the results considering the research problem, objectives, and hypotheses. Finally, Chapter 7 provides the concluding remarks, encompassing the findings, implications, theoretical and empirical contributions, limitations, and future research paths propositions.

2 THEORETICAL BACKGROUND

Although more companies worldwide have started to invest in positive stakeholder engagement behavior, prior research on stakeholder theory reveals that there are still notable differences across national boundaries in terms of what engagement involves and how to address the expectations of diverse stakeholders, taking into account the institutions of the countries in which the companies operate (Gallego-Álvarez & Pucheta-Martínez, 2020; Gupta et al., 2020; Pucheta-Martínez & Gallego-Álvarez, 2020; Kumar, Boesso, Batra & Yao, 2021). In this sense, this research establishes its theoretical guidelines for empirical analysis by approaching stakeholders' perspectives and institutional influence features.

The stakeholder approach sees organizations as vehicles by which stakeholders are engaged in a joint involvement of creating value for each other (Freeman et al., 2007). In this regard, one of the most recent definitions of stakeholders understands that they are groups and individuals who have a stake in the success or failure of a business (Valentinov & Chia, 2022).

From an overall perspective, the stakeholder approach was initially established as a viewpoint centered on strategic management. However, despite this initial effort, much of the subsequent research remained disconnected to some extent from developments in the field of strategy, as there was a mismatch between the mainstream of strategic studies and the focus of stakeholder scholars until the mid-2000s (Bridoux & Stoelhorst, 2022; Valentinov & Chia, 2022). Such a mismatch was due to strategic researchers' emphasis on economic approaches while stakeholder scholars maintained their focus on ethical issues in business (Bridoux & Stoelhorst, 2022; Dmytriyev, Freeman & Hörisch, 2021).

In addition, more classic strategic management researchers view organizations as a collection of independent actors with agency and limited rationality (Valentinov & Chia, 2022; Bridoux & Stoelhorst, 2022). They tend to overlook the role of relationships among actors in shaping social reality. On the other hand, the stakeholder approach acknowledges the impact of interactional involvement between organizations and stakeholders in shaping social reality, with individualities and identities playing a vital role (Dmytriyev et al., 2021; Valentinov & Chia, 2022).

From this viewpoint, it's worth noting that stakeholder theory's integration thesis is a key principle, stating that business decisions often have an underlying ethical perspective, just as statements about ethics often have an underlying view of business (Freeman et al., 2010; Dmytriyev et al., 2021). Essentially, stakeholder theory refutes the notion of the separation fallacy, which suggests that business decisions lack ethical considerations (Harris & Freeman, 2008; Dmytriyev et al., 2021).

In recent years, there has been a noticeable shift towards a stakeholder perspective among mainstream strategy scholars, which can be attributed to the strengthening of Freeman's approach proposed in 1984. This change has been referred to as the "stakeholder turn" in the strategy field (Bridoux & Stoelhorst, 2022; Valentinov & Chia, 2022). In this respect, several stakeholder relational approaches have gained traction, such as stakeholder engagement; the stakeholder theory concept here studied taking institutional aspects into account. Such an approach can be found in previous research, such as Ioannou and Serafeim (2012) and Ortas et al. (2019), who conducted cross-national studies to investigate how national institutions influence firms' likelihood of engaging in corporate social responsibility-related actions with an emphasis on different kinds of returns and performance.

Regarding the institutional features addressed in this dissertation, Glynn and D'Aunno (2023) argue that institutional theory has become highly relevant in studying organizations over the past decades. As a result, the institutional view has drawn much interest, and many of its arguments have obtained empirical support in the business management field (Heugens & Lander, 2009). Thus, increased theoretical and practical approach diversity has been a result of institutional studies' expansion, and this has allowed the development of a wide variety of perspectives and applications (e.g., DiMaggio & Powell, 1983; Hall & Soskice, 2001; Voronov & Vince, 2012, Lawrence, Leca & Zilber, 2013; Musacchio, Lazzarini & Aguilera, 2015; Fainshmidt et al., 2018; Glynn & D'Aunno, 2023). By addressing a broader institutional theory, comparative capitalism as a subject for study may be interpreted as one of these perspectives (Bohle & Greskovits, 2009).

In the context of studies of the varieties of capitalism, here also referred to as institutional systems, we observe the relevance of nations’ institutional characteristics. Such features generate impacts at different levels, such as the countries' competitiveness or even the actions and relationships between subnational actors, such as companies, non-governmental organizations, and individuals (Bohle & Greskovits, 2009). In other words, the studies carried out in this field have as their main scope the investigation of the impacts of the different institutional configurations of the economies on their respective performances, considering political, economic, and social factors, as well as the existence or not of an institutional convergence process between countries, economies, or markets.

As a concept originated in the field of political economy (Ebeling, 2016), the approach of varieties of capitalism has lately gained traction in business and management literature, particularly when considering the influences of environmental factors on company behavior (Bazuchi, Zacharias, Broering, Arreola & Bandeira-de-Mello, 2013). In this context, recent studies have shown an increased interest in examining the effects of national characteristics on the relationships between companies and their interest groups. As a result, there has been a diverse range of studies exploring various institutional scenarios. This research focuses on understanding institutional factors affecting stakeholder engagement strategies, in line with the current trend in research.

Regarding these initial reflections, as one of its specific objectives, this doctoral dissertation aims to provide a comprehensive review of the literature that brings together the topics of stakeholder engagement and the varieties of institutional systems. This section will illustrate the evolution of concepts and applications over time, considering potential institutional influences on corporate stakeholder engagement strategies and practices to further understand both themes in business and management studies. Discussions about potential research paths to be covered in this dissertation and beyond will be possible in this way. The first theoretical contributions of this thesis are thus established with the presentation of propositions regarding relationships between institutional elements and stakeholder engagement.

From this perspective, this theoretical background section seeks to contribute to the literature as follows. First, we analyze the conceptualization of stakeholder theory, followed by a focus on stakeholder engagement as a prominent subject in the stakeholder literature. Then, drawing upon insights from the varieties of institutional systems literature, the research reveals a need to further understand the stakeholder theory in this background. Next, we briefly address interconnections between the primary theoretical references of this research in order to know how the interdisciplinary literature is organized around the two theoretical models used.

This discussion serves as a basis for understanding the relevance of the subjects to be analyzed in this dissertation. In this way and closing the theoretical reflections, we have a new chapter proposing research hypotheses considering gaps in the literature and corroborating that national institutions' influences are determinants for stakeholder engagement practices.

2.1 Stakeholder Theory

The stakeholder concept emerged in the 1980s, not precisely as a theory then, to address the need for organizations concerned with social issues to manage relationships with individuals and groups. Since its seminal discussions, the stakeholder perspective considers that an organization's success relies on its capacity to manage the relationships with its stakeholders (Madueño, Jorge, Conesa & Martínez-Martínez, 2016). Thus, as mentioned, the stakeholder approach was positioned as an alternative to traditional strategic and economic theorizing (Bridoux & Stoelhorst, 2022).

The concept of stakeholder theory originated from Freeman's book, which was published in 1984 and introduced the most famous model of stakeholder strategy. Although there are numerous definitions of the term stakeholder in the literature (Frooman, 2010), Freeman's definition is the most commonly used. According to Freeman (1984), a stakeholder is any person or group that can impact the attainment of organizational objectives or is influenced by the pursuit of these objectives.

Freeman (1984) states that in formulating the strategic direction of companies it is important to align social and ethical issues with the traditional vision of the company, and changes in strategic direction must consider the impact on stakeholders, especially on primary stakeholders. Subsequently, Evan and Freeman (1988) propose, as an objective function of companies, that the real purpose of the company is to serve as a vehicle to coordinate the stakeholders' interests. The proposed objective function contributes to incorporating the theory of stakeholders in the business strategy and, on the other hand, contradicts the primacy of shareholders defended by the theory of the firm, which culminated in criticisms and misinterpretations of the theory of stakeholders, named by Phillips (2003) as the limits of theory.

Based on this conceptualization, various theoretical and empirical frameworks developed in the stakeholder literature can be identified. Freeman (1984), for example, outlines stakeholder management at three levels: rational, procedural, and transactional. The rational level involves identifying the stakeholders of the corporation and their positions regarding the company's objectives. At the procedural level, it is important to comprehend which organizational procedures are involved in relationships with stakeholders and how these procedures are related to the rational level. Lastly, the transactional level pertains to the organization's discussions and negotiations with stakeholders and how these negotiations are linked to the preceding levels.

Other authors that can be seen as seminal regarding the development of stakeholder theory are Donaldson and Preston (1995). They propose that stakeholder theory encompasses three dimensions: descriptive, instrumental, and normative. Stakeholder theory explains the corporation as a set of cooperative and competitive interests with intrinsic value in the descriptive dimension. The relationships between stakeholder management and corporate performance are developed in the instrumental dimension, assuming that good stakeholder management positively influences the corporation's overall performance, including financial or non-financial performance. Finally, the normative dimension, which serves as the theoretical foundation for the stakeholder approach, assumes that stakeholders have legitimate interests with intrinsic value and that managers should prioritize stakeholders in order to maximize value for the firm and its network of stakeholders as a whole (Boaventura, Bosse, Mascena & Sarturi, 2020).

Another classical understanding is the one of the organization as a nexus of contracts, where Jones (1995) advances the instrumental dimension of the stakeholder theory. The author uses three economic theories - agency theory, transaction cost, and team production theory - to describe the nature of contracts. The contract is the core of Jones's (1995) instrumental stakeholder management approach. The author highlights that managers are self-interested agents and that preventing or inhibiting their opportunistic behavior is costly. In this regard, because mutual collaboration can reduce transaction costs, businesses that establish contracts or relationships with their stakeholders based on trust and cooperation have a competitive advantage over those that don't. In other words, managers should establish and preserve beneficial connections with stakeholders (Jones, Harrison & Felps, 2018).

The classification of stakeholders proposed by Clarkson (1995), in which stakeholders can be described as primary or secondary, is one of the most well-known stakeholder classifications. The primary stakeholders are essential for the company to keep operating. In this conceptualization, the company and its primary stakeholders are highly interdependent. Generally, the government, communities, employees, customers, suppliers, and shareholders/investors are considered to be the company's primary stakeholders. Secondary stakeholders are those who do not directly interact with the corporation but still influence, affect, or are affected by it. The author characterizes the media and other interest groups as secondary stakeholders because, despite not being crucial to the organization's operation, they can affect how the primary stakeholders perceive the organization. This classification is adaptable considering the company's reality (Freeman et al., 2007).

Mitchell, Agle, and Wood's (1997) stakeholder salience model made an essential contribution to the identification and classification of stakeholders. The degree to which managers prioritize competing stakeholder demands is referred to as salience. The authors argue that stakeholders can be identified based on three features: their power to influence the company, the legitimacy of the stakeholder relationship with the company, and the urgency of stakeholder demands. The managerial perception of the presence of these features is positively related to the stakeholder salience (Mitchell et al., 1997). In light of these features, stakeholders are labeled as latent, expectant, and definitive stakeholders, depending on the number of attributes they possess. The necessity to identify and evaluate the relevance of stakeholders is also reinforced by Wood, Mitchell, Agle, and Bryan (2018) in their revisit to the theoretical proposal of stakeholder salience twenty years after its initial release.

Stakeholder theorists usually perceive strategic management as managing social relationships (Bridoux & Stoelhorst, 2022). The core element of the theory is that value creation relies on establishing enduring, equitable relationships with the firm's stakeholders (Vidal, Berman & Van Buren, 2015; Dmytriyev et al., 2021; Bridoux & Stoelhorst, 2022). Following the establishment of the foundations of stakeholder theory between the 1980s and 1990s, several theoretical and empirical developments were observed in relation to the aforementioned "stakeholder turn" in organizational strategy studies. Thus, in the context established in the 2000s, we can observe the strengthening of the "management for stakeholders" or "value creation stakeholder theory" strand (Freeman et al., 2007), which was also led by some of the seminal authors mentioned above. According to this viewpoint, a business can be viewed as a collection of relationships that help to create value among parties interested in the business's operations (Freeman, 2017). Therefore, business is about the interactions and value creation between clients, suppliers, employees, financiers (stockholders, bondholders, banks, etc.), communities, and managers (Freeman, 2017). Knowing how these relationships occur is essential for understanding a business.

In this context, Freeman, Harrison, and Wicks (2007) proposed stakeholder value-creation strategies with the goal of enhancing the organization's ability to manage its stakeholders. Such strategies cover issues such as dealing specifically with each stakeholder and their respective demands or developing an integrative approach for creating value, considering the organization's simultaneous relationship with its multiple stakeholders and how it can create value for several stakeholders simultaneously. Similarly, Harrison, Bosse, and Phillips (2010) proposed the management model for stakeholders of creating and distributing value, indicating that stakeholder theory focuses on creating and distributing value (Freeman et al., 2010), concepts that must be considered inseparable. For the authors, management models must therefore address this interconnection.

From the perspective of Harrison et al. (2010), value distribution can lead to significant reciprocity between the company and its stakeholders. In other words, stakeholders' satisfaction and engagement with the company's goals may rise if they believe the organization goes beyond and above what is required to maintain the relationship. Conversely, a failure to cooperate with the organization may arise if stakeholders consider that the treatment they receive is unfair or incompatible with the exchange level. Therefore, according to the authors, the best stakeholder management strategy fosters positive reciprocity, leading to more significant value creation and providing the company with a competitive advantage in its field of operation (Harrison et al., 2010).

Finally, considering our goal of approaching stakeholder literature from a broad perspective, it’s worth noting that stakeholder theory researchers have also explored the different ways corporations and stakeholders can relate to each other (Waddock, 2002; Manetti, 2011). They've identified several stages of this relationship, starting with stakeholder mapping, where companies identify their primary and secondary stakeholders. From there, companies work on managing the expectations of their stakeholders and balancing different viewpoints. Finally, in the stakeholder engagement phase, companies involve their stakeholders in decision-making processes, share information, and create models of mutual value creation, legitimacy, and responsibility.

Stakeholder theory is a corpus of literature undergoing continuous development over the past four decades, as described in this subsection. It is then possible to visualize different moments of the theory, beginning with the initial reflections that went against the mainstream of the so-called theory of the firm, moving on to the elaborations and applications of theoretical and empirical models, and finally arriving at the most contemporary discussions involving value creation and the incentive to understand the relationships as well as stakeholder and organization engagement processes.

In this viewpoint, the theory has presented conversations within and beyond the academic business and management setting while continuously analyzing other theoretical sources. The stakeholder theory permeates multiple study domains; hence, it can be understood as a constantly evolving theory (Laplume, Sonpar & Litz, 2008). From this perspective, the stakeholder approach has expanded in recent years to include arguments from different theoretical perspectives, while discussions over the value concept and the relevance of organization-stakeholder relationships have become increasingly in-depth. The idea of stakeholder engagement and institutional issues on stakeholder management are examples of expanding research areas. We will discuss both subjects in the subsections that follow.

2.2 Stakeholder Engagement

Over the last few decades, there has been a growing emphasis on the stakeholder approach, which recognizes the importance of businesses engaging with a broader range of stakeholders beyond their shareholders. This stakeholder engagement approach involves a commitment to resolving any issues that may arise between the organization and its business environment (Manetti, 2011). Thus, as a core tenet of the stakeholder literature, companies are vehicles by which stakeholders are engaged in a joint and cooperative involvement of creating value for each other (Freeman, Harrison, & Wicks, 2007). But what does stakeholder engagement mean in terms of the literature?

Stakeholder engagement as a construct started to acquire importance in the stakeholder literature at the beginning of the 2000s (Andriof et al., 2002; Kujala et al., 2022), even though some early notions of engaging with stakeholders emerged in the 1990s (Svendsen, 1998; Mitchell et al., 1997; Savage et al., 1991). The term was conceived to distinguish the ideas of maximizing shareholder value and engaging stakeholders in creating value in the long run (Andriof et al., 2002; Kujala et al., 2022).

Stakeholder theory serves as the basis of most studies in the fields of business and management examining stakeholder interactions (Kujala et al., 2022; Henisz et al., 2014; Noland & Phillips, 2010; Greenwood, 2007). Therefore, it emphasizes the importance of considering stakeholders and their interests in business strategy (Freeman, 1984). Research into stakeholder engagement is, then, a logical development for stakeholder theory, as stakeholder theorists have concentrated on elucidating the dynamics involved in the connections between organizations and their stakeholders (Bundy et al., 2018; Bridoux & Stoelhorst, 2016; Mitchell et al., 2015; Andriof et al., 2002). Thus, it is common practice in this field to use the stakeholder engagement construct to put stakeholder theory into practice (Kujala et al., 2022; Freeman et al., 2017; Greenwood, 2007).

As highlighted in a recent literature review, the notion of stakeholder engagement in contemporary works can be understood from moral, strategic, and/or pragmatic perspectives (Kujala et al., 2022). Such elements are dispersed throughout numerous theoretical and conceptual discussions, demonstrating a diverse subject characterized by rapid growth and continuous updating.

In this regard, if the organization acts ethically and the interaction is mutual and consensual, stakeholder engagement is moral. Several researchers argue that stakeholder engagement is morally beneficial if it involves respect and appreciation (Noland & Phillips, 2010), giving stakeholders a voice (Ghodsvali et al., 2019), and considering stakeholders' needs and interests (Todeschini et al., 2020). Furthermore, the strategic component of stakeholder engagement is concerned with stakeholders' willingness to participate in creating business value (Kujala et al., 2022). This participation often relies on resource commitments to improve outcomes such as corporate performance, prestige, or competitive advantage. Finally, the pragmatic aspect of stakeholder engagement emphasizes the ways in which stakeholder engagement is enacted in the social and natural environment and evaluates which activities could be suitable considering contexts and instances (Sandberg & Tsoukas, 2011; Kujala et al., 2022).

Despite its diverse nature, stakeholder engagement has become an increasingly important topic in business and management studies (Kujala et al., 2022). This idea has gained traction due to its ability to explain the complex relationships between companies and their stakeholders (Noland & Phillips, 2010; Kujala & Sachs, 2019; Business Roundtable, 2019; Harrison, Phillips & Freeman, 2020; Mitchell et al., 2022; Kujala et al., 2022). Research has highlighted the significance of stakeholder engagement in various organizational activities, including value creation (Harrison et al., 2010; Harrison & Wicks, 2013), strategic planning, and decision-making (Ramus & Vaccaro, 2017; Castelló et al., 2016), innovation (Bendell & Huvaj, 2020; Watson, Wilson & Macdonald, 2020), reporting and accounting (Stocker et al.,, 2020; Pucheta-Martínez, Bel-Oms & Rodriges, 2020), and corporate social responsibility and sustainability (Grushina, 2017). Prior research has also explored the politics and democratic ideals of stakeholder engagement (Holzer, 2008; Dawkins, 2015), analyzed the influences of stakeholder engagement in environmental, social, and governance performance (Ortas et al., 2019), and examined how stakeholder activism affects organizational activities (Bakker et al., 2013).

The literature says that engaged stakeholders are more likely to collaborate and support the strategies and practices of the organization, positively influencing its sustainability and development (Stocker et al., 2020; Freeman, 2017). For Andriof et al. (2017) and Phillips (1997), this is a process that creates a dynamic context of mutual respect and change with a cooperative scheme of collaboration and dialogue. As claimants with legitimate demands, stakeholders assume the role of moral agents (Jones et al., 2018) with the responsibility to contemplate the rights and interests of the corporation and of the other parties and then promote effective and ethical relationships (Manetti, 2011). These relationships can be developed through different strategies, ranging from minimally involving stakeholders and their interests in organizational processes to those with a high degree of involvement, in which stakeholders can participate more actively in the company's decision-making process (Valle & Sarturi, 2022).

The heterogeneity of studies on engagement reveals a myriad of definitions and applications of the concept. For a better visualization of some of the understandings of stakeholder engagement, Table 1 presents definitions proposed throughout the development of the subject.

Table 1 - Stakeholder Engagement Definitions

Authors	Sources	Definitions of stakeholder engagement
Greenwood (2007)	Journal of Business Ethics	The practices that the organization undertakes to involve stakeholders in a positive manner in organizational activities.
Hine & Preuss (2009)	Journal of Business Ethics	The practical mechanism through which social responsibility can be enacted in corporate decision making as a counterweight to the primacy of shareholder value.
Noland & Phillips (2010)	International Journal of Management Reviews	Type of interaction that involves, at minimum, recognition, and respect of common humanity and how the actions of each may affect the other.
Manetti & Toccafondi (2012)	Journal of Business Ethics	A process that creates a dynamic context of interaction, mutual respect, dialog, and change, not a unilateral management of stakeholders.
Cundy et al. (2013)	Journal of Environmental Management	A broad inclusive and continuous process between a project and those potentially affected by it.

O'Riordan & Fairbrass (2014)	Journal of Business Ethics	All those activities which are undertaken to create opportunities for dialogue between an organization and one or more of its stakeholders with the aim of providing an informed basis for the organization's decisions.
Viglia et al. (2018)	Journal of Business Research	Interactive experiential process based on actors' engagement with a focal organization, but more intensively with other stakeholder community members.
Gupta et al. (2020)	Strategic Management Journal	Strategies that are linked to performance in combination with firm-level factors.
Stocker et al. (2020)	Corporate Social Responsibility and Environmental Management	The firm's ability to establish collaborative relationships and dialogue with a wide variety of stakeholders.
Valle & Sarturi (2022)	Cadernos EBAPE	Refers to the company's ability to involve stakeholders in different organizational activities in order to find collaborative solutions for value creation.
Mitchell et al. (2022)	Journal of Business Ethics	The interaction among a firm and its stakeholders that address knowledge problems to improve correspondence in understanding between managers and stakeholders, thereby assisting in resolving ethical challenges faced by managers.
Kujala et al. (2022)	Business & Society	Refers to the aims, activities, and impacts of stakeholder relations in a moral, strategic, and/or pragmatic manner.

Source: Research data (2023)

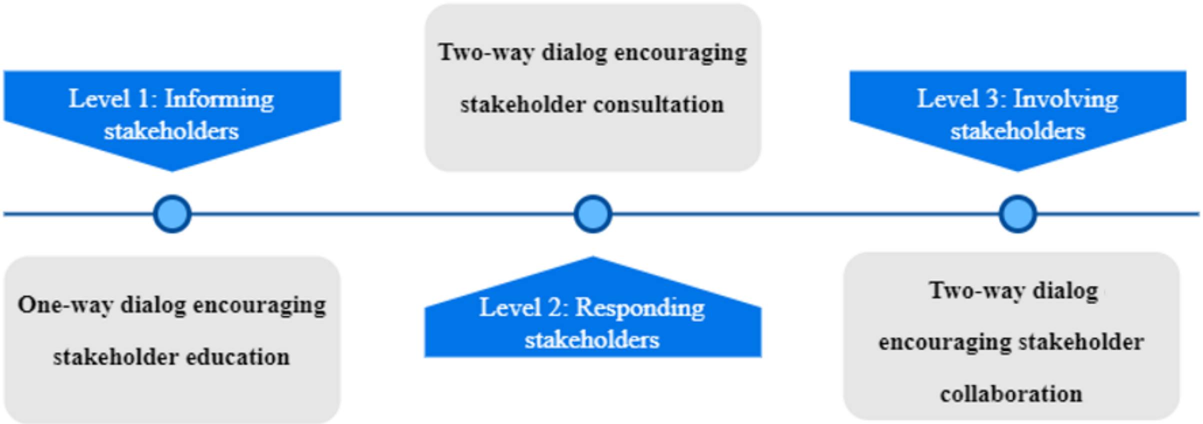
In sum, stakeholder engagement can be understood as the organization's ability to establish collaborative relationships with a wide variety of stakeholders involved in its processes and objectives in order to create value. It includes practices that organizations develop to positively engage their stakeholders in the pursuit of goodwill, consent, cooperation, accountability, trust, or enhanced corporate governance (Greenwood, 2007). Based on these arguments, stakeholder engagement is seen as a process of consultation, communication, dialogue, and exchange (Stocker et al., 2020).

Therefore, this dissertation follows Greenwood (2007) and Stocker et al. (2020) by arguing that stakeholder engagement refers to the collection of activities a company takes with its diverse stakeholder groups to foster communication, strengthen relationships, and ultimately impact the firm's value creation processes. Through this manner, the research seeks to consider the concept's moral, strategic, and pragmatic components – emphasizing organizational strategy. In a practical perspective for the empirical operationalization of this research, the engagement of stakeholders may be understood as a company's capacity to build collaborative partnerships and communication with a wide range of stakeholders.

Stakeholder engagement can, thus, be observed in terms of the nature, quality, and extent of company-stakeholder relationships and may have different levels within its composition, with distinct directions for each stakeholder group at distinct moments (Stocker et al., 2020; Greenwood, 2007). Such relations can be analyzed considering the levels of engagement found in the literature. From a one-way dialog to different kinds of two-way dialogs, we understand that stakeholder engagement levels can be measured by the complexity of dialogs between companies and their stakeholders (Stocker et al., 2020).

Based on previous research (Friedman & Miles, 2006; Morsing & Schultz, 2006; Stocker et al., 2020), engagement levels are determined by the prioritized practices and stakeholders at each level. For example, Figure 1 illustrates this differentiation across three levels: (1) Informing Stakeholders (identifying and informing stakeholders), (2) Responding to Stakeholders (consulting and supporting stakeholder demands), and (3) Involving Stakeholders (establishing partnerships and collaboration between the company and stakeholders).

Figure 1 - Stakeholder Engagement Levels Rationale



Source: Friedman & Miles (2006); Morsing & Schultz (2006); Stocker et al. (2020)

In this perspective, Table 2 provides a more detailed illustration of what may be understood for each level of stakeholder engagement based on the prior explanations and the Figure above.

Table 2 – Stakeholder Engagement Levels Classification

Engagement levels	Kinds of engagement	Engagement practices
Informing Stakeholders (One-way dialog)	Track	Monitor; Compile actions.
	Inform	Periodic reports; Intranet; Social media; Newsletters; Technical visits; Exhibitions; Training and development

Responding Stakeholders (Two-way asymmetric dialog)	Consult	Back channel dialogue; Opinion polls; Market research; Forums; Meetings, Contact centers; Customer service; Openness to complaints and suggestions.
	Support	Sponsorship; Philanthropic activities.
Involving Stakeholders (Two-way symmetric dialog)	Collaborate	Informal cooperation; Working Groups; Commissions; Committees, Agreements; Associations
	Partner	Formal cooperation; Alliances; Joint programs.

Source: Friedman & Miles (2006); Morsing & Schultz (2006); Stocker et al. (2020)

As observed, at the first level, the strategy for informing stakeholders is built on a unidirectional dialogue model to listen to stakeholder demands and concerns (Morsing & Schultz, 2006). This degree of engagement is transactional without strong bonding (Bowen et al., 2010) and is considered low engagement and commitment. At the second level, the stakeholder response strategy uses a "two-way" dialogue model to consult stakeholders and express their needs and interests (Morsing & Schultz, 2006). The relationship is transitional (Bowen et al., 2010) and has an intermediate level of engagement due to an improvement in commitment. Regarding the third engagement level, for Morsing and Schultz (2006) and Greenwood (2007), organizations can develop actions to involve stakeholders and seek to establish a relationship, which Stocker et al. (2020) call "engagement by involvement". At this level, communication is bi-directional and symmetrical, and stakeholders' interests are considered when the organization's goals are set. They are invited to participate in organizational decision-making and planning. Therefore, this can be regarded as a high engagement level.

In an overview, the classification of engagement levels used in this dissertation is based on Stocker et al.'s (2020) model, which considers the depth and direction of communication with stakeholders, as well as the goal of the engagement strategy. Transactions with an informational purpose result in low engagement levels, while consultative interactions involve two-way dialogues in a transitional relationship and result in medium engagement levels. Engagement strategies intended to involve stakeholders are classified as high engagement levels.

Authors such as Kujala et al. (2022) and Freeman et al. (2017) suggest that it is necessary to conceptualize stakeholder engagement more nuancedly, seeing stakeholder relations as the interconnections between business, society, and stakeholders. One of the potential paths that we can see in the literature is that it is essential to look at stakeholder engagement as a contextual phenomenon that takes place at a particular time and/or location. Following prior research (Ortas et al., 2019; Kujala et al., 2022), this study recognizes the need to foster a deeper understanding of the practice of stakeholder engagement in various contexts. These viewpoints show the potential for more research on stakeholder engagement in other geographical and organizational contexts, expanding beyond the contextual majority of studies, which predominantly examine North America and Western Europe.

Considering the levels of relationship between organizations and stakeholders and contextual influences in different environments, the following subtopic describes the contextual aspects that will be observed in the empirical phase of this dissertation. Institutional system features will be addressed, which we understand may affect how corporations adopt stakeholder engagement actions.

2.3 Institutional approach: Varieties of Capitalism

Institutional heterogeneity across national contexts has fostered a vast and complex comparative capitalism literature (Jackson & Deeg, 2008; Witt & Jackson, 2016; Jackson & Deeg, 2019; Carney, Estrin, Liang & Shapiro, 2019). National diversity is seen in education and skills development, employee relationships, financial system, interfirm networks, internal dynamics of the firm, ownership features, corporate governance, and state institutions (Witt & Redding, 2013; Witt & Jackson, 2016). Some research has examined how these variations tend to group into specific institutional structures.

From this perspective, different typologies that conflict with or complement each other can be found in various literature (Witt & Jackson, 2016). For example, Hall and Soskice (2001) recognize Liberal and Coordinated Market Economies as two varying types of capitalism. Likewise, Amable (2003) has identified five distinct kinds: Market-based, Asian, Continental European, Social-democratic, and Mediterranean. Meanwhile, Whitley (1999) has identified six distinctive organizational structures: the Fragmented, the Coordinated Industrial District, the Compartmentalized, the State-organized, the Collaborative, and the Highly Coordinated. In addition, other kinds of capitalism that are not exclusive to highly industrialized nations have also been proposed (Witt et al., 2015; Witt & Jackson, 2016; Fainshmidt et al., 2018).

Before providing the institutional framework discussed in this research, it is essential to reflect on the model's conceptual roots based on the field's diverse theoretical perspectives. Thus, to better appreciate the potential connections with the stakeholder literature, it is necessary to briefly examine the concept of one of the main approaches of comparative capitalism (Delgado, 2010). Thus, we engage in debate concerning the Varieties of Capitalism (VoC), a notion first proposed by Hall and Soskice (2001) that has grown into a significant, multifaceted, and well-respected topic of research within the field of applied social sciences focusing on institutional systems (Mello, 2015; Diniz, 2010).

Since its inception, the VoC approach has attracted significant attention and influence in comparative discussions across capitalist political economies, culminating in one of the most heated debates in the field of social sciences (Witt & Jackson, 2016). This is because VoC offered an alternative to the dominant understanding of the neoliberal globalization process, which saw a globe on the verge of replicating the US model of capitalism (Delgado, 2010). In this way, the approach claimed that the rooting of specific institutional standards in different countries, which supported their productive structures, contributed to maintaining national differences in the world capitalist system (Delgado, 2010; Diniz, 2010; Mello, 2015).

From this point of view, VoC centered the argument on corporate behavior, emphasizing that the strategic activities of industries and business organizations are heavily influenced by national institutional factors (Delgado, 2010; Witt & Jackson, 2016; Fainshmidt et al., 2018). By defining four mechanisms intrinsic to the business sphere, Hall and Soskice (2001) underlined two prevailing coordination logics in the productive regimes of developed countries. Such mechanisms would be (1) the relationship between capital and work; (2) the labor education and training system; (3) the financial system; and (4) the relationship between the companies. Thus, as mentioned, considering the coordination logics, Hall and Soskice (2001) identified two main models of capitalism, the Liberal Market Economies (LME) and the Coordinated Market Economies (CME). The United States best represents the first model in these arrangements, while Germany comes closest to the traits indicated in the second category (Witt & Jackson, 2016).

The concept of VoC focuses on individual actors and views companies as crucial agents in capitalist economies. It considers their activities and responses to technological advancements and international competition, which impact overall economic performance levels (Hall & Soskice, 2001; Mello, 2015). VoC also takes a relational approach to companies, emphasizing the development and utilization of competencies and capabilities in producing and distributing goods or services through internal relationships with its workforce and external relations with stakeholders such as customers, suppliers, shareholders, unions, government, and others. This approach values company-stakeholder interactions and provides a fertile ground for management studies focusing on stakeholder theory research.

2.4 Varieties of Institutional Systems

Studies in the management field that emphasize institutional scope as a relevant factor in business relationships are frequent (Jackson & Deeg, 2019). This body of literature usually follows the theoretical perspective derived from institutionalism that, among other goals, seeks to explain the social origins of the stakeholder's actions which, by definition, do not act in an isolated way (Granovetter, 1985). In this regard, Scott (2013) defines the institutional environment as stable rules, social standards, and cognitive structures in a society that guides, favor, or restrict business activity.

According to Wicks and Berman (2004), the institutional environment can be considered in three dimensions: institutional, sociocultural norms, and industry norms. The institutional dimension concerns formal rules and laws, using such devices to control the confidence necessary to establish an exchange. The sociocultural dimension concerns the shared cultural values that shape group behavior. Finally, the industry dimension refers to the implicit and explicit rules that connect and adjust the market behavior.

Mapping the institutional context does not just mean identifying and analyzing the stakeholders of the environment. It is a much more comprehensive procedure, which involves understanding the actors, resources, interests, and institutions and the trajectories, stories, and contingencies experienced in each context (Aligica, 2006). The legitimacy of stakeholder claims is assessed differently in different institutional settings. Managers must recognize the plurality of behavioral assumptions, normative rules, and regulations in each institutional environment to act strategically and respond appropriately to each stakeholder (Aaltonen, 2013). In other words, differences such as in national values, culture, political and economic structures, among others, all contribute to issues related to company-stakeholder relationships, thus affecting competitive success (Porter, 1990).

In this perspective, as the formal and informal sources of rules, national institutions underpin much of the context in which business takes place (Fainshmidt et al., 2018; Ortas et al., 2019). Recently, the field has witnessed the emergence of a more holistic theoretical foundation for understanding the impact of institutional diversity on business phenomena by focusing on how national institutions configure in complementary ways into systems of economic organization. The model presented below serves as a basis for understanding the institutional dimensions observed in this investigation.

Going beyond the previous typologies, which focus on systemic variation in advanced economies, Fainshmidt et al. (2018) present the Varieties of Institutional Systems (VIS) framework, a more comprehensive one that captures the institutional context provided by the state, financial markets, human capital, social capital, and corporate governance institutions in a larger number of systemic contexts also considering the increasingly significant group of newly-developed, emerging, and developing economies. These five institutional dimensions are shown in Table 3 and are briefly explained below.

Table 3 - Institutional contextual dimensions - VIS Framework

Institutional Dimension	Influence factor
Role of the State	State direct dominance State indirect intervention Type of state
Role of financial markets	Equity market Credit market Family wealth State-provided capital
Role of human capital	Coordination with labor Knowledge capital
Role of social capital	Generalized trust
Role of corporate governance	Ownership concentration Family ownership Family intervention in management

Source: Fainshmidt et al. (2018)

The State in the VIS framework refers to a country's government, focusing on the executive branch (Fainshmidt et al., 2018). For the authors, considering the first VIS dimension, the States can influence their economies in three fundamental ways. First, based on Zhang and Whitley (2013), they note that the State's dominance of the national economic system is determined by the extent to which it is directly involved in economic production, usually through majority or minority state-owned enterprises. This contextual element within the State dimension is known as "State direct dominance" for the VIS framework. Second, it is said that States may also indirectly intervene in the economy through capital provision, favoritism, or even participation in corporate governance (e.g., political appointments to companies' upper echelons) (Musacchio & Lazzarini, 2014; Fainshmidt et al., 2018; Ortas et al., 2019). This element is known as "State indirect intervention in the private sector" for the VIS framework. Third, the States may qualitatively differ in their broad behaviors regarding national economic life (Fainshmidt et al., 2018). In this sense, mainly based on Carney and Witt (2014), the VIS framework considers four types of states.

When the state sets and enforces the rules of the game, particularly protecting property rights, it is referred to as a (i) Regulatory State (Fainshmidt et al., 2018). Except for inherently public goods and services, regulatory states usually do not participate significantly in economic activity (Rosecrance, 1996). The United States is a major example of this type of state. For (ii) Welfare States, the emphasis is on protecting and promoting the economic and social well-being of its citizens, primarily through the redistribution of wealth by the state (Carney & Witt, 2014; Fainshmidt et al., 2018; Ortas et al., 2019). Such countries are known for their employment stability and political relations, which are more coordinated or collaborative than in other examples (Esping-Anderson, 1996). Northern European countries are traditionally recognized as welfare states. A (iii) Developmental State employs significant control over its economy, mostly by considering long-term interests and engaging in developing its business sectors through national industrial policies (Fainshmidt et al., 2018). In this type of state, as it is possible to observe in Brazil and Taiwan, there is a strong sense of corporate identity and a dense set of institutionalized connections between the government and private elites (Evans, 1989; Evans, 2014; Ortas et al., 2019). As the last type of state in the VIS framework, a (iv) Predatory State is characterized as being ruled by elites who monopolize power through the use of non-transparent decision-making procedures, weak institutions, and the absence of clear market competition (Carney & Witt, 2014; Fainshmidt et al., 2018; Ortas et al., 2019). An example of this type of state is Russia, with the influence of the Moscow elites on the country's business (Lane, 2008; Ortas et al., 2019).

Financial markets – the second VIS dimension – are a central element of any national institutional system whereby capital is acquired and distributed (Davis & Marquis, 2005). Moreover, the literature says that a society's path-dependent political and economic history underpins the logic with which financial markets develop and operate (Acemoglu & Robinson, 2012; Davis & Marquis, 2005; Ortas et al., 2019).

In this sense, the Financial Markets dimension relies heavily on credit and equity markets, which are crucial institutional factors. Borrowers access funds from lenders through credit markets, while equity markets allow companies to raise capital by issuing shares of stock to investors. These markets are interconnected with regulatory bodies and financial intermediaries and play a vital role in the functioning of the economy. Developing credit and equity markets can lead to economic growth and financial stability (Levine, 1997), while the absence of well-functioning markets can result in financial market inefficiencies, leading to economic instability and reduced investment opportunities (Beck & Levine, 2004).

In addition to the influences of equity and credit markets, Lazzarini et al. (2015) argue that the State often acts as a financial capital provider outside of traditional private sources, particularly in countries where the State has been an owner of factors of production or financial institutions. Furthermore, in economies where financial markets are relatively underdeveloped, firms tend to rely on internal capital markets based on accumulated family wealth (Steier, 2009). Therefore, the financial roles of family wealth and state-provided capital also need to be considered to better understand institutional contexts (Fainshmidt et al., 2018).

The third dimension of the VIS taxonomy, the role of human capital, concerns the formation of knowledge – intangible assets needed to meet corporate objectives, such as staff expertise, data, and intellectual properties (LaFayette, Curtis, Bedford & Iyer, 2019) – and the organization of labor markets within a national institutional system (Fainshmidt et al., 2018; Ortas et al., 2019). For the Framework, the knowledge capital level within a national environment is important because it determines the way organizations engage with employees in productive activities. For example, organizations may invest in firm-specific skills when knowledge capital is collectively available to firms within an economy. In contrast, knowledge capital scarcity may reduce incentives to invest in particular capabilities and even sectors (Schneider, 2013). Furthermore, when discussing coordination with labor, it is stated that countries with strong labor organizations tend to prioritize social and environmental issues and make longer-term investments, unlike countries with fragmented labor markets (Hall & Soskice, 2001; Ioannou & Serafeim, 2012; Fainshmidt et al., 2018; Ortas et al., 2019).

The fourth VIS dimension, collective social capital, is the degree to which individuals have generalized trust in one another and society (Fainshmidt et al., 2018; Inglehart, 1999). According to the literature, trust significantly determines how nations' economies and their corporate relations function (Knack & Keefer, 1997). The idea of generalized trust has been linked to various benefits, including economic growth (Bjørnskov, 2012; Kong, 2015), improved government quality (Knack, 2002; Herreros, 2023), and greater subjective life satisfaction (Bjørnskov, 2003). According to McEvily, Perrone, and Zaheer (2003), the degree to which economic players trust one another and institutions is a guiding concept that underpins corporate behavior and coordination. As such, in the absence of widespread trust, both individuals and organizations are more likely to rely on informal networks based on closer connections (Kong, 2015, 2016), making it difficult to engage in a broader stakeholder network. On the other hand, people and companies in countries that foster economic equality experience higher levels of trust (Fainshmidt et al., 2018; Uslaner, 2008).

The fifth dimension considers how companies are controlled and managed. It encompasses three elements. First, for the VIS, ownership concentration is an essential element of the institutional context because it shapes how owners, labor, and management interact with each other (Aguilera & Jackson, 2003). Second, the importance of wealthy family dominance in most parts of the world also extends to the corporate governance sphere. Specifically, family ownership of large corporations is a defining characteristic of many economies in the Middle East, Latin America, Northern Africa, and Asia (Ortas et al., 2019). Even in contexts where formal institutions may be relatively strong, deep cultural and clan-based institutions permeate the formation of family ownership (Fainshmidt et al., 2018). Third, because the extended family is often the core unifying feature as a means to overcome institutional voids (Steier, Chua & Chrisman, 2009), in some national contexts, founding families tend to run their businesses directly, encouraging a systemic family intervention in management.

The five dimensions presented, considering their respective influence factors, result in the classification scheme of the VIS framework. Thus, combining the theoretical advances proposed by Fainshmidt et al. (2018) and the classic model established by Hall and Soskice (2001), it is possible to categorize nine institutional systems. The first two, Market-based and Collaborative, are updated nomenclatures of the LME and CME proposed in the VoC model. The other seven categories, therefore, organize markets of different contexts that had not been contemplated with classifications before the VIS framework. Table 4 summarizes the reasoning for the VIS framework's classification scheme.

Table 4 - Classification Reasoning - VIS Framework

Varieties of Institutional Systems	Reasoning
Market-based (LME)	In this setting, companies typically depend on hierarchies and competitive market structures to handle their operations. Transactions between parties are characterized by a competitive and contractual exchange of products and services, with little personal involvement. Market players adjust their supply and demand in response to price signals, with neoclassical economics highlighting the significance of marginal calculations. Market institutions serve as an effective means to coordinate the economic activities of different actors.
Collaborative (CME)	Here, organizations rely increasingly on non-market relationships to collaborate and build their core competencies. These non-market strategies of coordination usually include more relational or partial contracting, network monitoring based on private

	information exchanged within networks, and more collaborative, rather than competitive, partnerships to enhance the firm's competencies.
State-Led	Despite their diverse political regimes, 15 economies under the "State-Led" arrangement share institutional components. Pakistan, Russia, Venezuela, China, Vietnam, and Indonesia have restricted civil rights. Malaysia and India, with more civil rights, are also included. In all "State-Led" nations, the state directly orders the society's economy. Political networks coordinate economic activities in these systems. These networks centralize power and introduce predatory aspects to the state. The state dominates, yet family ownership and administration are prevalent. Banks supply financial capital.
Fragmented with Fragile State	In this arrangement, 12 Sub-Saharan African and Middle East economies share certain features of the "State-Led" configuration. Still, direct and indirect state intervention is considerable and institutional voids are substantial. This configuration lacks human, financial, and social capital. Companies in this system operate their economic activity in silos utilizing internally accumulated resources without coordinating with labor.
Familty-Led	The 11 geographically spread economies of this arrangement are predominantly "Family-Led". This configuration includes Northern Africa, Central Asia, and Latin America economies. Affluent and dominating families in these economies generally dominate ownership, resource allocation, and management. Consequently, they have sufficient influence to organize the economy. As a result, labor coordination is low, but trust tends to be high, allowing wealthy families to set economic policies.
Centralized Tribe	Six Middle East-only affluent economies make up this arrangement. Most economies in this configuration typically prioritize public welfare. This paternalistic institutional structure is based on the organizing principle that powerful families in these cultures are guardians of essential resources and expected to provide a safety net for the lower classes. Many of these societies are quite tribal in nature and take care of their own within the extended clan. "The family is the state" for these economies, thus boundaries frequently blur.
Emergent LME	These economies are increasingly becoming market-oriented. However, some, like Singapore, preserve some state dominance over the regulatory government system. Despite their diverse economic levels, these economies have strong financial, social, and knowledge capital. With their fast-growing economies, Botswana and Namibia contrast with other African nations with institutional gaps. Another Middle Eastern economic outlier is Israel.
Collaborative Agglomerations	Eastern European economies are in this arrangement. These economies have developmental states that invest in industrial areas and promote growth. Labor must cooperate with ownership, which is not excessively concentrated. Banks provide most financial capital. They have many characteristics with conventional CMEs like Germany, but they tend to emphasize growth and development more than equality and national social systems.
Hierarchically Coordinated	This arrangement and the Collaborative Agglomerations share features such as a developmental state, substantial knowledge capital, and banking as the main source of financial capital. However, overall trust is lower, the state is more engaged, and families substantially influence business governance. Still, families are less important than other configurations. Coordination occurs primarily among concentrated (increasingly family) owners and state investment agencies due to low widespread trust and little coordination with a high-quality workforce.

Source: Hall & Soskice (2001); Fainshmidt et al. (2018).

Considering the context of the previous table, Table 5 presents the nine institutional systems categorized in the VIS Framework.

Table 5 - Classification Scheme - VIS Framework

Varieties of Institutional Systems	Related countries
Market-based (LME)	Australia; Canada; Ireland; New Zealand; Switzerland; United Kingdom; United States of America.
Collaborative (CME)	Austria; Belgium; Denmark; Finland; France; Germany; Italy; Japan; Netherlands; Norway; Portugal; Spain; Sweeden.
State-Led	Argentina; Bangladesh; Belarus; China; India; Indonesia; Malaysia; Mongolia; Pakistan; Philippines; Russia; Sri Lanka; Thailand; Venezuela; Vietnam.
Fragmented with Fragile State	Angola; Cameroon; Democratic Republic of the Congo; Egypt; Ethiopia; Ghana; Kenya; Rwanda; Senegal; Sudan; Tanzânia; Uganda.
Familty-Led	Algeria; Arzerbaijan; Brazil; Colombia; Mexico; Morocco; Nigeria; Peru; Tunisia; Yemen
Centralized Tribe	Bahrain; Iran; Kuwait; Qatar; Saudi Arabia; United Arab Emirates.
Emergent LME	Botswana; Chile; Hong Kong; Israel; Namibia; Singapore; South Africa.
Collaborative Agglomerations	Czech Repoublic; Estonia; Hungary; Latvia; Lithuania; Poland; Slivak Republic; Slovenia.
Hierarchically Coordinated	Bulgaria; Georgia; Jordan; Kazakhstan; South Korea; Lebanon; Romania; Taiwan; Türkiye; Ukraine.

Source: Fainshmidt et al. (2018).

In sum, Fainshmidt et al. (2018) created the VIS Framework by considering the five dimensions and their thirteen influencing factors. The framework provides a contextual basis for examining the levels of stakeholder engagement in various institutional systems. In this sense, with a focus on achieving the objectives of this dissertation, the investigation establishes a focus on the analysis of the institutional dimensions of the model. This decision is justified when we consider that such dimensions are a standard level of analysis for all institutional systems presented. Thus, developing a research that has not yet been applied before will be possible. This may pave the way for future investigations, encouraging the continuity of the reflections developed here.

For the next and last theoretical background subtopic, we present the interrelationships of the primary theoretical foundations used in this study. This helps to emphasize the connections identified in the existing literature that have contributed to the development of this research.

2.5 Stakeholder Engagement and Institutional Influences: Identifying the ties

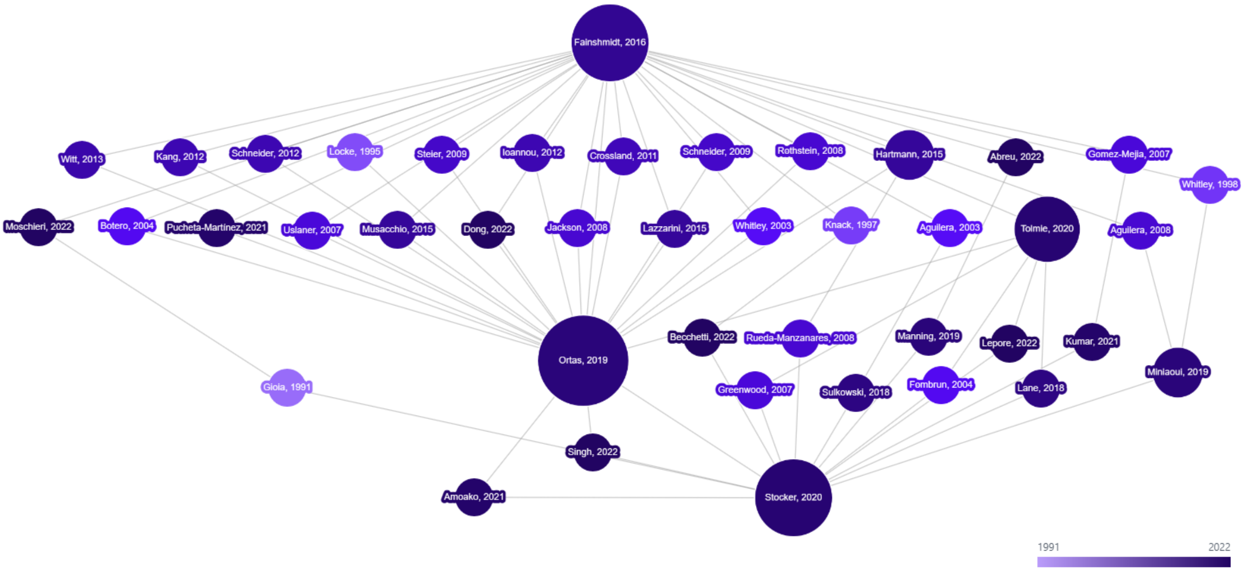
This topic aims to conclude the theoretical background of this research. After highlighting the argumentative particularities of stakeholder engagement and institutional systems, it is important to observe how these two themes are interconnected based on existing literature.

In business and management research, there has been a growing interest in concepts associated with stakeholder theory, including stakeholder engagement, and approaches related to institutional theories, such as the different types of institutional systems. As already discussed, while stakeholder engagement has been recognized as a critical element of overall corporate performance and sustainability (Stocker et al., 2020), institutional systems have been identified as a key factor in shaping organizations' behaviors and strategies (Fainshmidt et al., 2018; Ortas et al., 2019). From a broad perspective, the intersection topics of stakeholder engagement and institutional systems represent a promising avenue for management research. By exploring the interplay between these two concepts, scholars can generate new theoretical insights and empirical evidence to inform the development of more effective and sustainable management practices.

Amid this understanding, we conducted brief literature research through the Inciteful research platform (Weishuhn, 2023). Such a tool is intended for interdisciplinary scholars trying to bridge two domains, allowing an interactive visualization of how the literature connects them. In sum, with the platform, it is possible to observe how the research paths between two references of interest are organized based on their citations. Thus, it is possible to map which studies are part of the interdisciplinary network that a given investigation is entering. Considering this dissertation, it was possible to confirm the growing and current network of citations being formed around the interests in themes related to stakeholder engagement and varieties of institutional systems.

It's important to note that the tool's goal is not to exhaustively cover the relationships between the intended themes but rather to highlight existing interconnections between two references. The aim is to provide an overview of how they are related in the literature. Figure 2 shows the created literature connections map.

Figure 2 - Literature Connections



Source: Inciteful (2023)

From this perspective, as seen in Figure 2, we can argue that there is a field under development concerning the relationship between the concept of stakeholder engagement and the approach to the varieties of capitalism or institutional systems, represented here mainly by the works of Stocker et al. (2020) and Fainshmidt et al. (2018). In other words, considering the interconnections between both references, it is possible to notice that a research network is being established with publications in internationally respected journals, many of which are used as theoretical and empirical support in this dissertation.

The current study aims to facilitate the development of an interdisciplinary argument between stakeholder theory, represented by the concept of stakeholder engagement, and institutional theories, represented by the approach of the varieties of institutional systems. As such, with a research proposal not yet explored in the literature, this study might contribute to the presented research network. In this sense, to build the paths of the empirical stage of this dissertation, the next chapter discusses the development of the study's hypotheses.

3 HYPOTHESES DEVELOPMENT

The following hypotheses are based on the assumption that institutional features influence the way stakeholders are engaged by businesses operating in national arrangements. As a result, we recognize that institutional contexts are important considerations for businesses implementing stakeholder engagement practices.

3.1 The role of the State

The global economy has undergone significant changes in the past decades, leading to increased attention on the State's involvement in capital accumulation and corporate relationships (Grosman, Okhmatovskiy & Wright, 2015; Alami & Dixon, 2020). This has resulted in a resurgence of state-led development in the global South, including Brazil, China, India, Russia, and other emerging economies. Moreover, there has been significant government intervention in economically developed countries since the financial crisis of 2008. This was recently observed in the first quarter of 2023, with the US and Swiss governments implementing measures in their banking sectors. The rise of State involvement in economies has resulted in the establishment of sovereign wealth funds, state equity participation, and state-owned enterprises (Alami & Dixon, 2020; Fainshmidt et al., 2018). In sum, the role of the State needs to be better understood in terms of its influence on company-stakeholder relations.

Considering the first dimension of the VIS Framework and the objectives of this research, it is possible to address different ways of State intervention in the economies (Whitley, 2003; Fainshmidt et al., 2018; Ortas et al., 2019): (a) directly, when the State actively engages in economic production, primarily through state-owned enterprises; and (b) indirectly, when it provides capital, shows favoritism, or participates in corporate governance. It is important to mention that the State types mentioned earlier will not be addressed in the empirical stage of this study since they are the only variables that are categorized differently when the others are considered. However, according to Fainshmidt et al. (2018), the types of State are connected to the kinds of direct and indirect state involvement, so we understand that such a decision will not harm the capacity to describe the dimension of the State's role.

According to Fainshmidt et al. (2018) and Zhang and Whitley (2013), the amount to which the State is directly and actively involved in economic production, generally through majority or minority State-owned firms, determines the State's dominance over the national economic system. Indeed, when the markets analyzed in this study are considered, one can argue that State enterprises represent 80% of the stock market's value in China, 62% in Russia, and 38% in Brazil (Fainshimidt et al., 2018), three of the greatest economies in our sample. In this context, regarding previous decades, State companies accounted for one-third of emerging economies' foreign direct investment (Wooldridge, 2012; Fainshmidt et al., 2018). This contextual aspect within this dimension is known as State Direct Dominance. On the other hand, as argued by the literature (Boyer, 2005; Kang & Moon, 2012; Musacchio & Lazzarini, 2014; Fainshmidt et al., 2018), the State can also intervene in the economy indirectly through capital provision, favoritism, and participation in corporate governance (e.g., political appointments to upper echelons). This contextual feature is referred to as an indirect intervention in the private sector or State Indirect Intervention.

According to previous literature (Finchelstein, 2017; Mariotti & Marzano, 2019; Mariotti & Marzano, 2020), the State has various ways of intervening in businesses. Analyzing direct and indirect interventions can help evaluate the State's involvement with companies and stakeholders. The literature suggests that State action, whether direct or indirect, can impact the relationships between companies and their stakeholders. However, research on how the State can significantly influence these relationships is still lacking (Finchelstein, 2017). Therefore, examining organizational behavior in light of the State's enabling role under different national institutions (Mariotti & Marzano, 2019) is essential. For many countries, State dominance and intervention are critical factors in how organizations allocate their resources.

Considering our arguments on the role of the state in the influence of stakeholder engagement, we hypothesize:

H1: The role of the State is positively associated with companies’ stakeholder engagement levels.

3.2 The role of financial markets

Concerning the second dimension, we observe that equity markets, credit markets, the families, and again the State are the primary means through which companies acquire and distribute financial resources (Fainshmidt et al., 2018). As such, considering the VIS framework, market institutions have an impact on how companies can implement stakeholder relationships (Ortas et al., 2019).

From an overall perspective, the equity and credit markets serve as the primary funding sources for businesses in certain nations, like the USA, where shareholder dispersion is frequently significant. Since economic players constrain them less, organizations in countries with established credit and equity markets can better create innovative management practices (Hall & Sosquice, 2001; Fainshmidt et al., 2018; Ortas et al., 2019). As a result, businesses are more likely to develop favorable connections with their stakeholders (Ortas et al., 2019), taking into account, for example, increased action on sustainability-related matters in their operations, such as creating greener manufacturing methods that use less energy, waste, and emissions (Berrone et al., 2013). Moreover, in these nations, consumers significantly impact how businesses behave. Often, they do this by calling for more responsible business practices (Christmann, 2004). In this context, companies are increasingly compelled to adopt socially conscious business strategies (Ortas et al., 2019) that can improve stakeholder engagement actions.

In contrast to contexts that primarily rely on equity and credit markets, the State can also serve as the foremost provider of financial resources for businesses in several nations, such as China, since it formerly held the production factors or banking institutions (Fainshmidt et al., 2018; Ortas et al., 2019). This is, therefore, another way for the State to interfere in company-stakeholder relations that operate in its territory; thus, as a provider of capital, the State can also influence actions related to stakeholder engagement. Furthermore, as Steier (2009) argued, companies tend to rely on local capital markets based on accumulated family wealth in economies with relatively weak financial markets, such as those in Arab nations. Therefore, when families or States step into the role of capital provider, they tend to substitute equity and credit markets (Schneider, 2009; Fainshmidt et al., 2018; Ortas et al., 2019).

In sum, to have an accurate image of the national institutional environment, we must consider not just the equity and credit markets' characteristics but also the financial roles of family wealth and state-provided capital. This is especially important in economies that are still in the process of developing.

Considering our arguments on the role of financial markets in the influence of stakeholder engagement, we hypothesize:

H2: The role of the financial markets is positively associated with companies' stakeholder engagement levels.

3.3 The role of human capital

According to the third dimension, which can be analyzed via knowledge capital and labor coordination, a nation's human capital will also influence companies' overall strategy and performance (Fainshmidt et al., 2018). Knowledge capital is the term employed to define an organization's intangible assets, including its connections, relationships, learned skills, learning processes, and inventions (LaFayette et al., 2019). Knowledge capital is an intangible asset since it relies on the abilities and capabilities of a company's workforce; as a result, companies may have a competitive advantage over competitors thanks to their knowledge capital (LaFayette et al., 2019). The amount of knowledge capital clarifies how companies engage their workforce in productive endeavors. Firms in an economy may invest in firm-specific skills, including training and development, health and safety, diversity, and opportunity programs, when knowledge capital is made collectively accessible to them. These programs are often connected to well-established stakeholder engagement practices (Ortas et al., 2019). Conversely, a lack of knowledge capital may make it less attractive to invest in specific skills and employee satisfaction (Schneider, 2013). According to prior research, it may be stated that companies that attract qualified job applicants have a wider candidate pool; hence their selection process can lead to competitive advantages (Ortas et al., 2019).

The second influence factor of a country's human capital is coordination with labor. Labor relations are essential to how human capital is used, according to Hall and Soskice (2001), who also make the distinction between whether or not businesses coordinate strategic actions with labor. In this regard, nations with solid labor organizations tend to emphasize social and environmental issues and often make longer-term investments (Hall & Soskice, 2001; Ioannou & Serafeim, 2012; Fainshmidt et al., 2018), thus impacting companies-stakeholder relations primarily through the stakeholder employee. However, in nations with more fragmented labor markets, collective action is less prevalent, as well as political decisions and ties to family elites predominate human resource management (Ortas et al., 2019).

Considering our arguments on the role of human capital in the influence of stakeholder engagement, we hypothesize:

H3: The role of human capital is positively associated with companies’ stakeholder engagement levels.

3.4 The role of social capital

Regarding the fourth dimension, it is proposed that a society's capacity to develop social capital is based on its long-term experience with social structuring, which is rooted in historical and cultural events that can be traced back over lengthy periods (Fainshmidt et al., 2018; Ortas et al., 2019). According to Inglehart (1999), collective social capital, or generalized trust, relates to how much people trust other members of their community and society. As aforementioned, according to earlier studies, trust strongly affects how countries' economies behave (Knack & Keefer, 1997). In this regard, widespread mistrust in society prevents the institutionalization of long-term contractual ties between businesses and stakeholders (Fainshmidt et al., 2018). Instead, it motivates managers to forge informal relations to guarantee the availability of necessary supplies (Whitley et al., 1996). In other words, as noted by Mcevily et al. (2003), the level of trust among economic players is an organizing principle guiding the behaviors of and coordination between companies and their groups of interest. Consequently, the lack of generalized trust causes people and organizations to rely increasingly on particular trust as they develop informal networks based on extended clan or family ties as their foundation for organizational relationships (Kong, 2016; Fainshmidt et al., 2018).

In countries with high Social Capital, companies tend to adopt more socially responsible practices and engage more meaningfully with their stakeholders (Kong, 2016; Ortas et al., 2019). This is because society is more likely to demand and value corporate social responsibility, and companies can gain financial and reputational benefits by adapting to these expectations. On the other hand, in countries with low Social Capital, companies may face challenges in adopting socially responsible practices and engaging with their stakeholders (Kong, 2016; Ortas et al., 2019). This is because society may have social norms and values that do not value corporate social responsibility, which can lead companies to prioritize profit over social and environmental impacts.

Confidence seems to be higher in economically developed countries than in other less developed countries for the VIS framework (Fainshmidt et al., 2018). In general terms, generalized trust is weaker in developing and emerging economies for reasons such as widespread corruption or the inefficiency of the state. This is especially true in developing economies when corruption is prevalent and often arbitrary (Rodriguez et al., 2005). Nevertheless, it may not always be the case since previous research has revealed a significant difference in these economies' levels of trust and corruption (Nannestad, 2008; Kong, 2016). For instance, regardless of economic progress, countries that promote economic equality may have higher levels of trust (Uslaner, 2008; Fainshmidt et al., 2018). Due to these factors, social capital can assume a position of interesting influence on the way companies relate – or engage – with their stakeholders in different institutional contexts.

Considering our arguments on the role of social capital in the influence of stakeholder engagement, we hypothesize:

H4: The role of social capital is positively associated with companies' stakeholder engagement levels.

3.5 The role of corporate governance

Corporate governance refers to the formal and informal systems, structures, and processes businesses use to manage and regulate their operations and stakeholder interactions (Mallin, 2016). It outlines the rights and responsibilities of all parties involved in the corporation (Aguilera & Jackson, 2003). By implementing effective corporate governance practices, businesses can establish transparency, accountability, and ethical conduct – all of which are essential for successful stakeholder engagement (Jackson, 2005).

For the fifth dimension, it is argued that three elements define how companies are controlled and managed. Those elements are (a) ownership concentration; (b) family ownership; and (c) family intervention in management (Witt & Redding, 2013; Fainshmidt et al., 2018). Considering the first element, despite ownership patterns observed in most liberal markets, ownership is substantially concentrated in most nations worldwide, especially when formal institutions tend to be relatively weak and financial markets are undeveloped. Moreover, this concentration commonly covers institutional voids – or weaknesses – (Khanna & Palepu, 2010; Fainshmidt, 2018; Luiz et al., 2021; Abreu et al., 2023) in these economies.

Following Aguilera & Jackson (2003), ownership concentration is a crucial feature of the institutional setting because it determines how owners, workforce, and management - consequently, stakeholders - interact and engage. In this respect, stakeholder engagement enables governance structures to become more dynamic and receptive to stakeholders' expectations (Monteduro et al., 2021). In addition, the communication process between organizations and their stakeholders gives rise to collaborative learning interactions that would allow the converging of activities and confidence among the stakeholders involved (Monteduro et al., 2021). According to the literature, companies' stakeholder engagement-related activities have historically been adversely associated with a higher ownership concentration (Ortas et al., 2019; Dam & Scholtens, 2013; Barnea & Rubin, 2010). This is because significant shareholders frequently control corporate boards, reducing the diversity and independence of the executives. However, considering the characteristic of ownership concentration as a way of covering institutional voids, to the best of our knowledge, there is no evidence of the effects of ownership concentration on stakeholder relations of companies in underdeveloped economies.

Regarding the second element, the importance of wealthy family dominance in most parts of the world also extends to the corporate governance sphere (Fainshmidt et al., 2018). In many economies, a handful of wealthy families control a substantial portion of the large corporate sector (Fogel, 2006). Through control pyramids, cross-holding, and other mechanisms, these families can hold a vast amount of corporate assets (Fainshmidt et al., 2018). Even in contexts where formal institutions may be relatively strong, deep cultural and clan-based institutions permeate the formation of family ownership. Prior research contends that although family businesses can act responsibly or irresponsibly, there is a positive tendency to act responsibly in relationships with their stakeholders because there is a risk that lousy reputation spillovers from a firm to a family can happen more readily in family businesses than in non-family companies (Block & Wagner, 2014).

According to earlier research, family-owned companies highly value non-financial purposes, including identity, sustainability, resource development, and maintaining a good family reputation (Block & Wagner, 2014; Berrone et al., 2010; Westhead et al., 2001). In this sense, Zellweger et al. (2010) believe that an identity fit between families and companies might enable family firms to care about their corporate reputations and to pursue goals that benefit multiple stakeholders other than their families, thereby committing to stakeholder engagement practices.

Finally, concerning the element of family intervention in management, it can be argued that founding families tend to run their businesses directly rather than relying on professionalized management (Peng & Jiang, 2010) because the extended family is frequently the core unifying aspect as a means of overcoming institutional voids (Steier et al., 2009). Therefore, it is viable to assume that – similar to family businesses – family-controlled businesses are generally more likely to emphasize topics like employee satisfaction, inclusiveness, environmental concerns, and product-related matters (Ortas et al., 2019; Block & Wagner, 2014). In other words, the literature suggests that there will be a propensity for stakeholder engagement approaches to be more successful in scenarios with high levels of family intervention in management. As aforementioned, family ownership and intervention hence play an essential role in a country's corporate governance and influences the majority of sectors in many economies, such as South America, the Middle East, North Africa, and some areas of Asia.

Considering our arguments on the role of corporate governance in the influence of stakeholder engagement, we hypothesize:

H5: The role of corporate governance is positively associated with companies' stakeholder engagement levels.

3.6 The role of institutional environments

Stakeholder engagement is crucial for any company as it influences its performance and reputation (Freeman, 1984; Freeman et al., 2010; Stocker et al., 2020). Therefore, understanding and engaging with stakeholders is essential to establish healthy relationships, promoting dialogue, identifying opportunities, and mitigating risks (Stocker et al., 2020). Furthermore, based on our previous arguments, we conceive that institutional features, here defined as institutional dimensions, such as the State, financial markets, social capital, human capital, and corporate governance, significantly impact stakeholder engagement practices. In other words, the central argument of this thesis is that because institutional dimensions play a role in the stakeholder engagement of companies operating in national configurations, institutional environments – formed by the dimensions – are relevant issues for implementing stakeholder engagement actions.

Accordingly, from an overall perspective, the State can play a fundamental role in shaping stakeholder engagement practices by, for instance, establishing laws, regulations, and norms that guide companies. The State can act as a regulator to ensure companies protect stakeholder rights (Wright et al., 2021) and encourage responsible and sustainable practices (Alami & Dixon, 2020; Fainshmidt et al., 2018). However, excessive state intervention can discourage innovation and value creation (Henisz, 2000). In any case, it is important to acknowledge that stakeholder literature considers the State, represented by the government, an essential stakeholder in various business sectors (Clarkson, 1995).

Financial markets also play a critical role in stakeholder engagement practices, as investors are increasingly attentive to how companies manage their relationships with stakeholders to maximize shareholder value. For example, pressure from financial markets can lead companies to adopt shorter-term and shareholder-focused practices, compromising effective and sustainable stakeholder engagement practices (Branco & Rodrigues, 2008; Berrone et al., 2013).

Social and human capital also are essential institutional dimensions influencing stakeholder engagement practices. Companies with substantial social and human capital tend to have more effective and sustainable stakeholder engagement practices. Social capital, referring to the network of relationships and trust between companies and stakeholders, can be a source of competitive advantage (Portes, 1998; Kong, 2016). Human capital, referring to employees' skills, knowledge, and experiences, can affect stakeholder engagement through their ability to communicate and collaborate with these groups (Ioannou & Serafeim, 2012; LaFayette et al., 2019).

Corporate governance can play a crucial role in determining stakeholder engagement practices. Good corporate governance promotes transparency, accountability, and responsibility of the company towards its stakeholders, facilitating effective stakeholder engagement (Aguilera & Jackson, 2003). In contrast, poor corporate governance can impede a company's ability to adapt to stakeholder demands and expectations (Witt & Redding, 2013), negatively affecting stakeholder engagement practices.

In sum, for this investigation, we argue that national institutional features may significantly influence companies' stakeholder engagement actions. Therefore, understanding and managing these factors can lead organizations to more effective and sustainable stakeholder engagement, benefiting both the company and its stakeholders.

4 METHOD

Throughout the development of this study, some decisions were made to ensure methodological accuracy. The study is structured around two methodological paths, which will be discussed in the following topics. The first path involves a qualitative step, where a content analysis of stakeholder engagement practices in non-financial reports of publicly traded companies is conducted. These companies are from Emerging and Middle-Income Markets, as classified by the IMF (2022). The second path involves a quantitative step, which aims to assess the relationship between the institutional dimensions observed in the VIS framework and the stakeholder engagement practices analyzed in the previous step. To achieve this, the multivariate technique of quantile regression was applied, allowing for the observation of institutional influences at different intensities of each level of stakeholder engagement.

Our research focused on analyzing the nuances of stakeholder engagement under different institutional influences. To ensure accuracy, we limited our study to specific industries and companies that disclose their actions in a particular pattern. We investigated companies from sensitive sectors such as Energy (fossil fuels), mineral resources, chemical, and applied resources (Paper & Forest Products), which are more inclined to disclose non-financial information to stakeholders (Garcia et al., 2017). Furthermore, we conducted our research with companies with a history of disclosing non-financial reports following the Global Reporting Initiative (GRI) standards.

Finally, the research is established with a cross-sectional approach regarding temporal observation. The year 2019 was chosen for the qualitative and quantitative analyzes in order to avoid effects caused by the COVID-19 pandemic that devastated the world from 2020 onwards. This decision was made based on the researcher's observation that engagement actions related to the health issues of specific stakeholders could potentially distort the analysis.

After this chapter introduction, the topics below will present all methodological steps with greater depth and description.

4.1 Data Source: Non-Financial Reports

In this topic, we discuss the data sources used in this research. We present the context of non-financial or sustainability reports, as well as information about the operationalization of data collection and obtaining data related to the Varieties of Institutional Systems Framework.

Non-financial reports are documents that describe corporations' social, environmental, and governance activities and performance. They complement conventional financial reports that provide information on a firm's economic performance. These reports are usually developed based on standards and guidelines established by global organizations such as the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosures (TCFD), and the Sustainability Accounting Standards Board (SASB). These standards provide a framework for companies to report their non-financial activities and ensure the comparability of reports between organizations.

Typically, non-financial reports contain information on governance practices such as ownership structure, risk management policies and procedures, and executive compensation systems. They may also include data on social practices such as diversity and inclusion, equal opportunity policies, workplace health and safety, and human rights. Environmental practices may feature information on waste management, greenhouse gas emissions, energy efficiency, natural resource conservation, and climate risk management.

The primary purpose of non-financial reports is to assess a corporation's performance concerning sustainability and corporate social responsibility issues. Furthermore, these reports can aid investors and other stakeholders in making informed decisions based on criteria beyond financial outcomes. Non-financial report preparation can be a challenging and laborious procedure. It demands collecting data and information from multiple groups inside the organization, as well as interaction with external stakeholders. As a result, a good non-financial report must be accurate, relevant, and accessible to users.

In summary, non-financial reports are essential for corporations demonstrating their commitment to sustainability and corporate social responsibility. They provide valuable information to investors and other stakeholders seeking to conduct business with companies committed to ethical and sustainable business practices. In this study, as previously mentioned, we qualitatively analyze reports that follow standards established by the GRI.

4.1.1 Data Source: GRI Reports

GRI is an international standards-independent organization that helps companies understand and communicate their impacts on various topics in view of their strategic positioning and management of the organization. The GRI framework for sustainability reporting allows companies to identify, collect and report their information more clearly and comparably. The framework is designed to apply to companies of all sizes and sectors, and it provides guidance on identifying and reporting material non-financial issues regarding stakeholder relationships. In this regard, companies from over 160 countries follow the GRI standards (GRI, 2021).

Stakeholder engagement is an inseparable part of sustainability reports (Moratis & Brandt, 2017). Sustainability reporting aims to communicate to stakeholders the topics they find important and address the concerns they have raised (Moratis & Brandt, 2017). In addition, preparing such kind of report provides a chance for the organization to invite its stakeholders to discuss and opens a platform for dialogue (Morsing & Schultz, 2006).

When it comes to reporting procedures, international standards and guidelines require engagement with stakeholders, emphasizing that involvement and dialogue are crucial for producing meaningful reports. Neglecting to include stakeholders in the reporting process can lead to reports that are irrelevant to their needs and, therefore, ineffective (GRI, 2016). Reports that adhere to GRI standards provide insight into an organization's approach to engaging with stakeholders (GRI, 2016). In this study, stakeholder engagement information is standardized according to the indicators established by the GRI Standards.

The GRI Standards were designed to be flexible and adaptable to the different needs of organizations and to allow them to select the sustainability topics and indicators most relevant to their business and stakeholders (GRI, 2016). This framework replaced the previous G4 Guidelines between 2016 and 2017 and has been widely adopted by companies, governments, and other organizations worldwide. It is important to mention that, despite still being used, the GRI Standards began to be updated with the release, in 2021, of the GRI Universal Standards, which presents a new modular structure that allows organizations to report on more specific topics and issues (GRI, 2021). However, since the reports analyzed in this research were published considering the year 2019, we will follow the GRI Standards, which was the only one in force in the observed year.

In this study, we examine the content of the reports to draw implications about how corporations portray themselves and communicate with multiple groups of stakeholders about their stakeholder engagement approaches.

Content analysis was carried out considering the engagement actions informed by each company (Stocker et al., 2020). The Stakeholder Engagement section is mandatory for preparing and disseminating reports following the GRI Standards. Table 6 below shows the respective topics that were observed for this research in the mentioned section.

Table 6 - GRI Standards: Stakeholder Engagement topics

GRI Standards - Stakeholder Engagement
102-40 (list of stakeholder groups engaged)
102-41 (collective bargaining agreements)
102-42 (identifying and selecting stakeholders)
102-43 (approach to stakeholder engagement)
102-44 (key topics and concerns raised)

Source: GRI (2016)

Similar approaches have been used in previous studies to examine annual non-financial reports to quantify and categorize the amount of sustainability information provided systematically (Hourneaux Junior et al., 2017) as well as evaluate stakeholder engagement practices featured in the reports (Stocker et al., 2020; Grushina, 2017; Moratis & Brandt, 2017).

4.2 Sample and Data Collection

The data collection consisted of sustainability reports from companies operating in sectors known as sensitive, that is, those typically subject to political pressure and moral debate and with great potential for socio-environmental impact. Sensitive industries are characterized by heightened environmental, social, and governance (ESG) risks, subjecting them to greater scrutiny and regulation (Cai, Jo & Pan, 2012). This is due to their potential negative impact on the environment and society. Consequently, companies operating in sensitive industries face unique challenges when reporting on their sustainability and non-financial issues (Garcia et al., 2017). These challenges include, for instance, disclosing carbon emissions and climate change risk management strategies for oil and gas companies and reporting on environmental impact and community relations for mining companies, as well as social risks such as labor practices and human rights violations (Richardson & Welker, 2001; Lee & Faff, 2009; Garcia et al., 2017). As such, companies operating in sensitive industries require comprehensive sustainability strategies and reporting frameworks to address ESG risks and engage stakeholders in a transparent and accountable manner. By doing so, companies can demonstrate their commitment to sustainability issues while mitigating their potential negative impact on society and the environment.

These sectors were chosen because of the greater availability of reports published in the GRI standards, as well as the need to better understand the behavior of industries with a high potential for social and environmental impact. In this way, we follow Garcia et al. (2017), considering companies in the Energy (fossil fuels), mineral resources, chemical, and applied resources (Paper & Forest Products) sectors as sensitive.

The classification used in selecting companies is The Refinitiv Business Classification (TRBC), one of the most comprehensive and up-to-date sectors and industry classifications (Iazzolino et al., 2023). The TRBC classification covers over 75,000 global companies and is available in the Refinitiv Eikon database.

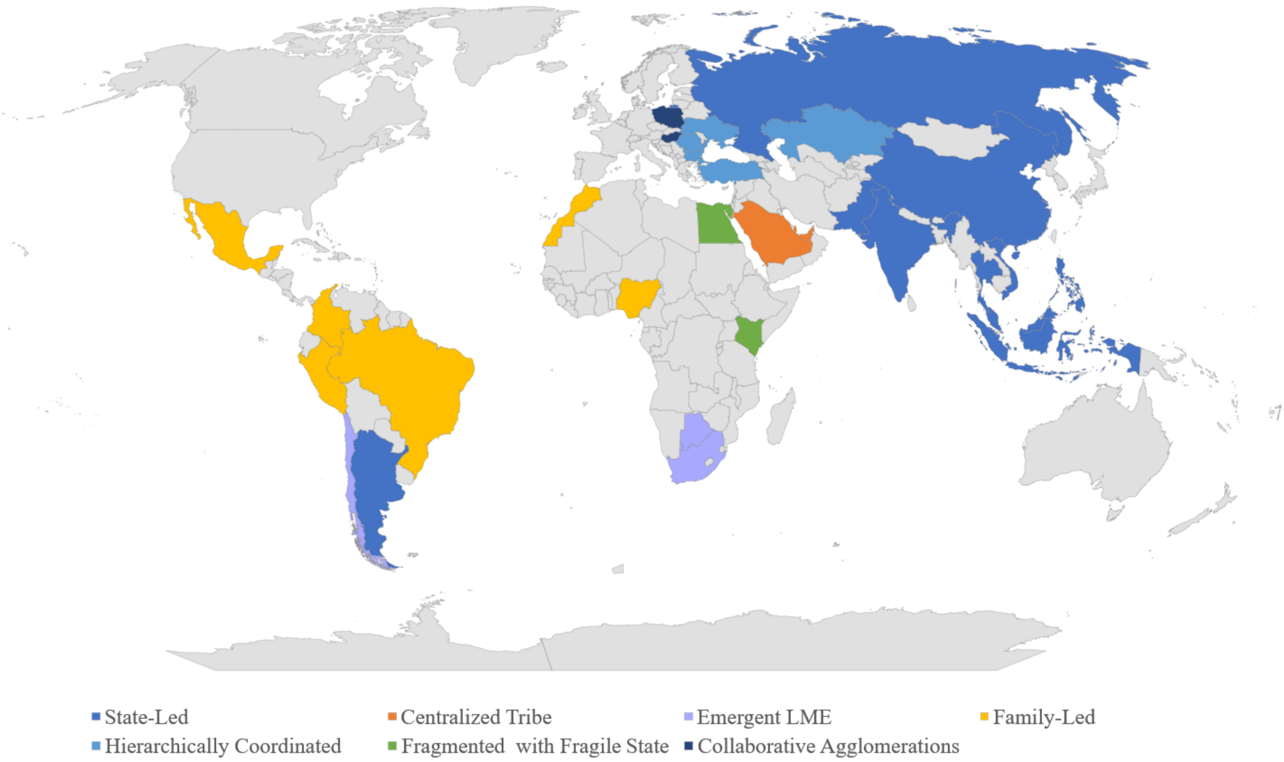
Since the discontinuity – in 2021 – of the GRI Database, the regularly updated data source of the Global Reporting Initiative, there has been a need to reorganize the studies that use sustainability reports in the GRI Standards as inputs. Due to this issue, this research had to reformulate data collection with the support of the Eikon database, which is, in summary, a comprehensive financial and non-financial information database that provides real-time market data, news, and analytics to researchers and financial professionals (Iazzolino et al., 2023). The Eikon database allowed for the selection of a large number of companies from all over the world, ensuring the continuation of data collection for this research. The Refinitiv Eikon database was used to select sectors and organizations, as well as to collect specific information on companies to enrich the analyses. The Business School of the University of São Paulo (FEA/USP) library provided access to the Eikon database.

In this perspective, a survey of companies in the sectors of interest for the research was initially carried out in the Eikon database. Then, lists of companies were generated considering six regions or continents. They are Africa (122), Asia (2569), Europe (580), Latin America (134), North America (1785), and Oceania (832). Thus, with a total of 6022 companies, efforts were carried out to look for reports disclosed in the areas of investor relations or similar on the websites of each company. Considering the filters related to the objectives of this research, such as the only use of countries categorized by the IMF as Emerging or Middle-Income Markets, and the fact that we only use companies with disclosure of reports related to the year 2019 following the GRI Standards, the final sample was established in 211 companies.

Concerning the sample of countries observed in the Variety of Institutional Systems framework, Fainshmidt et al. (2018) categorized 68 economies given the aforementioned five institutional dimensions (State, Financial Markets, Social Capital, Human Capital, and

Corporate Governance) and their respective influencing factors. We only consider countries classified as Emerging or Middle-Income Markets with companies from sensitive sectors that disclose sustainability reports following the GRI Standards. Thus, our final number settled at 32 countries, as presented in Figure 3, organized by the VIS Framework categorization.

Figure 3 - Countries represented in the sample by variety of institutional system



Source: Research data (2023)

In this regard, the analyzed markets, in alphabetical order, were Argentina (1.4%), Bahrain (0.5%), Botswana (1.4%), Brazil (7.1%), Bulgaria(0.5%), Chile (2.8%), China (8.1%), Colombia (1.4%), Egypt (0.9%), Hungary (0.5%), India (9.5%), Indonesia (7.6%), Kazakhstan (0.9%), Kenya (1.4%), Malaysia (2.4%), Mexico (2.8%), Morocco (0.9%), Nigeria (5.2%), Pakistan (1.9%), Peru (3.3%), Philippines (2.4%), Poland (3.8%), Qatar (0.9%), Romania (2.4%), Russia (9%), Saudi Arabia (1.4%), South Africa (11.8%), Thailand (3.8%), Türkiye (1.4%), Ukraine (0.5%), United Arab Emirates (1.4%), and Vietnam (0.5%).

It is worth mentioning that among the countries analyzed, some are actively involved in relevant forums like the BRICS, G20, and UN Security Council. This group of 32 economies is also responsible for contributing 38% of the expected global GDP growth in 2023 (IMF, 2022). Additional details and comparative charts on this topic can be found in Appendix A.

4.3 Content Analysis Operationalization

Non-financial reports offer a wealth of information on corporate sustainability and stakeholder interactions, as detailed in research by Stocker et al. (2020). These reports can be analyzed using content analysis tools to evaluate corporate relational characteristics. Through this approach, previous studies have used various units of measurement, such as evaluating the volume of disclosed information through phrases (Perrini, 2005), pages (Unerman, 2000), paragraphs (Belal, 2001), or keywords (Hahn & Lülfs, 2014; Stocker et al., 2020).

According to Krippendorff (1980, 2018), content analysis research that involves word frequency counts is useful for utilizing qualitative data to address quantitative issues. This dissertation analyzes non-financial reports to provide qualitative data that serves as input for the multivariate analyses aimed at understanding institutional effects on stakeholder engagement. Following studies validated by Stocker et al. (2020), this research employs a content analysis strategy that identifies analogous words in stakeholder engagement sections of reports based on the GRI Standards to determine different levels of stakeholder engagement actions.

Regarding the categorization of engagement levels in the reports, this investigation uses the Stocker et al. (2020) model, classifying companies' engagement practices at three levels: "Informing Stakeholders" (Level 1), "Responding Stakeholders" (Level 2) and "Involving Stakeholders" (Level 3). Thus, the classification found in Table 7 was the methodological feature used to analyze the reports and to code engagement practices with the support of the software NVivo 12.

Table 7 - Words that represent engagement actions in the GRI reports

Analyzed construct	Conceptual Attributes	Words used for content analysis
Informing Stakeholders (Engagement Level 1)	One-way dialogue; Transactional relationship; Informative intention; Low level of engagement.	Annual report, Reports, Corporate publication, Briefings, Disclosures, Brochures, Magazines, Website, Email, Webinars, Intranet, Social media, Twitter, Facebook, Instagram, LinkedIn, Newsletters, Press releases, Guide, Manual, Monitor, Compile actions, Terms of data protection and confidentiality, Contracts, Registration, One-way dialogue.

Responding Stakeholders (Engagement Level 2)	Two-way asymmetric dialog; Transitional relationship; Consultative intention; Intermediate level of engagement.	Feedback, Back channel dialogue, Forums, Surveys, Hearings, Interviews, Market survey, Market research, Meetings conferences, Face-to-face, Sessions, Audits, Debate, Call center, Contact center, Phone, Customer service, Interactions, Complaints and suggestions, Contracts, Registration, Tours, Exhibitions, Events, Training and development, Response activity, Respond, Two-way dialogue.
Involving Stakeholders (Engagement Level 3)	Two-way symmetric dialog; Relational Relationship; Decisional intention; High level of engagement.	Initiatives, Actions Cooperation, Working groups, Focus groups, Programs, Commissions, Committees, Agreements, Associations, Projects, Joint projects, Programs, Alliances, Strategic philanthropy, Strategic sponsorship, Advisory activities, Involvement activity, Involve, Decisions, Multi-way dialogue.

Source: Adapted from Stocker et al. (2020)

Succeeding the content analysis categorization and operationalization, the data were transferred to the software Excel in order to guarantee the organization of the engagement variables and subsequent joint compilation with the institutional variables. In this process, the respective frequencies found for the engagement levels were weighted by the number of pages that each report had, considering the topics of the Stakeholder Engagement section of the GRI Standards. In the generated worksheet, the engagement information of each company was initially compiled, as well as their respective sectors and country of headquarters. Table 8 presents a sample of the data organization in this step. After the conclusion of this dissertation, appendices B to I present examples of non-financial reports utilized for the content analysis, whose results served as input for the quantitative analyses.

Table 8 - Partial sample with engagement variables

Company	Country of Headquarters	TRBC Business Sector	Level 1	Level 2	Level 3
Braskem	Brazil	Chemicals	3,38	3,38	4,63
CSN	Brazil	Mineral Resources	4,00	1,25	2,00
Petrobrás	Brazil	Energy - Fossil Fuels	6,39	6,89	4,14
Suzano	Brazil	Applied Resources	3,71	2,59	2,12
Vale	Brazil	Mineral Resources	6,67	11,00	6,33
CMPC	Chile	Applied Resources	6,50	6,75	2,00
Empresas Copec	Chile	Energy - Fossil Fuels	20,00	7,33	4,67
Enaex	Chile	Chemicals	7,00	7,00	3,50

Aluminum Corp	China	Mineral Resources	3,86	2,57	0,29
Molybdenum	China	Mineral Resources	7,75	13,75	6,00
CNOOC	China	Energy - Fossil Fuels	11,00	9,00	4,00
Adaro	Indonesia	Energy - Fossil Fuels	8,50	8,50	3,50
Aneka Tambangt	Indonesia	Mineral Resources	10,43	2,57	2,86
Chandra Asrti	Indonesia	Chemicals	2,50	6,50	2,00
Aarti Industries	India	Chemicals	5,33	9,33	8,00
Bharat Petroleum	India	Energy - Fossil Fuels	3,70	6,10	2,50
Century Textile and Industries	India	Applied Resources	7,00	5,50	4,50
Arctic Paper	Poland	Applied Resources	4,50	6,00	3,00
Grupa Lotos	Poland	Energy - Fossil Fuels	5,33	2,89	3,89
KGHM Polska Miedz	Poland	Mineral Resources	3,00	4,00	7,00
ALRO	Romania	Mineral Resources	1,00	3,50	1,25
OMV Petrom	Romania	Energy - Fossil Fuels	2,63	4,25	1,63
Romcarbon	Romania	Applied Resources	6,50	12,00	7,00
Gazprom	Russia	Energy - Fossil Fuels	14,75	9,75	9,50
Polymetal	Russia	Mineral Resources	17,60	17,80	13,60
Uralkaliy	Russia	Chemicals	11,00	11,25	6,75
African Rainbow Minerals	South Africa	Mineral Resources	9,63	10,13	5,00
Impala Platinum	South Africa	Mineral Resources	8,33	6,00	5,89
Kumba Iron Ore	South Africa	Mineral Resources	4,40	5,20	5,20
Sahara International Petrochemical	Saudi Arabia	Chemicals	15,50	16,00	3,50
Saudi Arabian Mining	Saudi Arabia	Mineral Resources	2,00	3,00	1,33
Polisan Holding	Türkiye	Chemicals	13,80	6,40	4,00
Turkiye Petrol	Türkiye	Energy - Fossil Fuels	29,33	19,67	6,67

Source: Research data (2023)

The stakeholder engagement variables created with the data compiled in the content analysis were then grouped with the variables related to each dimension of the VIS Framework. This procedure served as input for carrying out the quantitative stage of this doctoral dissertation. In this sense, each dimension was understood as the set of its influencing factors considering its potential impacts on stakeholder engagement based on the literature mentioned in the formulation of each hypothesis and the relationship between the factors.

Once the content analysis stage was completed, we proceeded with the multivariate analysis stage. Using the software R and RStudio, we programmed and operationalized the quantile regression technique to investigate the impact of institutional dimensions on the levels of stakeholder engagement actions. In the upcoming section, we will discuss the steps taken to execute this technique, which allowed us to test our research hypotheses.

4.4 Multivariate Analysis Method - Quantile regression

Quantile regression is a statistical technique that can be used in various research applications. It allows the researcher to investigate the relationship between a continuous dependent variable and one or more independent variables while also considering the distribution of the independent variable.

In this regard, according to Koenker and Bassett (1978), quantile regression is a technique that extends the standard linear regression paradigm to the conditional quantile function of the response variable. The authors argue that standard linear regression models the conditional mean of the response variable given the explanatory variables. However, in many cases, the distribution of the response variable may not be symmetric and may have outliers. In such cases, the mean may not provide a complete picture of the relationship between the response and explanatory variables. Thus, quantile regression extends the paradigm by modeling the conditional quantile function of the response variable given the explanatory variables. This allows the researcher to examine how the relationship between the response and explanatory variables varies across the distribution of the response variable. In other words, this allows for a more complete and nuanced understanding of the relationship between the response and explanatory variables, particularly in cases where the distribution of the response variable is non-symmetric or contains outliers, as in the case of the present study when analyzing influences institutions at different levels of stakeholder engagement.

Considering this dissertation, by using a quantile regression analysis, it is possible to identify the features that contribute to or decrease stakeholder engagement across different levels. For example, the analysis may reveal that institutional dimensions, such as the roles of financial markets or social capital, can significantly improve stakeholder engagement at higher quantiles. On the other hand, at lower quantiles, the analysis may reveal that other institutional dimensions are critical for stakeholder engagement. These influences can be positive or negative, which will be discussed in the results chapter.

To better understand the institutional influences on stakeholder engagement actions in emerging and middle-income markets, the study tested the variables in five quantiles, here argued as intensities of each level of engagement. Therefore, the analysis uses the 10th, 25th, 50th, 75th, and 90th quantiles to investigate the relationship between stakeholder engagement as the dependent variable and institutional dimensions as the independent variable. In summary, as the distribution of stakeholder engagement is expected to be influenced differently across different institutional dimensions, we applied the multivariate technique of quantile regression.

The results of a quantile regression analysis can provide valuable insights for organizations seeking to improve their stakeholder engagement practices. By understanding the institutional dimensions that are most important for stakeholder engagement at different levels, organizations can tailor their engagement strategies to better respond to the needs and expectations of their stakeholders.

4.4.1 Analytical Procedures

Data analysis was divided into three stages, (i) univariate analysis with means, proportions, and standard deviation to describe the variables used in the study – to understand the individual patterns of the variables tested in this study; (ii) bivariate analysis with Pearson's product-moment correlation coefficient – to verify the intensity of linear association between pairs of variables (Hair Jr. et al., 2015); and (iii) multivariate analysis with quantile regression – to test the study hypotheses at different intensities of stakeholder engagement levels, being more robust to the presence of discrepant observations, for example (Koenker & Bassett, 1978; Koenker & Hallock, 2001). To test the hypotheses, the probability value (p-value) associated with the coefficients of variation (β) will be verified in five different categories: (i) when p-value < 0.001 (***) it will be interpreted that there is very strong evidence, (ii) when p-value < 0.01 (**) there is strong evidence, (iii) when p-value < 0.05 (*) there is sufficient evidence, (iv) when p-value < 0.1 (.) there is weak evidence and (v) when p-value > 0.1 there is no evidence for $\beta \neq 0$.

Even so, to support the hypotheses, it is necessary to verify the direction of the effect. The direction will not be interpreted when there is evidence that $\beta = 0$. Otherwise, it will be checked whether the theoretically predicted direction for β is equivalent to the empirical one. Data were analyzed using R software (R Core Team, 2013) and RStudio (RStudio Team, 2020). The script encompassing the executed commands can be located in Appendix J.

Specifically, as clarified below in the results chapter, the multivariate analysis stage is divided into three procedures. First, we present analyses considering individual influences of the institutional dimensions previously discussed in relation to stakeholder engagement practices and their respective levels. Second, we expand the analysis by grouping dimensions based on empirical rationale. Due to the strength of the evidence of the effects identified with the grouped dimensions, this dissertation's hypothesis test primarily relies on this second step.

Finally, as an additional analysis, we also examine a comprehensive model that considers all institutional dimensions and their impact on stakeholder engagement.

Accordingly, discussing the equational logic for the study's multivariate analyses is necessary. Understanding that the same interpretive reason will be used for all the procedures, the equation below represents the operationalization of the technique in its most complete version – the complementary analysis – which considers the influences of all institutional dimensions on the stakeholder engagement actions of companies in sensitive sectors acting in developing markets.

Therefore, the model for the quantile regression is represented by:

$$\boldsymbol{E_n = \beta_0 + \beta_1 . st + \beta_2 . fm + \beta_3 . sc + \beta_4 . cg + \beta_5 . hc +}$$

$$\boldsymbol{\beta_6 . log(ta) + \beta_7 . \sum sector + \varepsilon}$$

In this notation, the subscript E_n represents the dependent variable of stakeholder engagement where n = 1 represents the first level of stakeholder engagement, n = 2 represents the second, and n = 3 represents the third level of engagement. In other words, E_n works as our understanding of stakeholder engagement levels after operationalizing and cataloging the content analysis in the previously discussed non-financial reports.

In terms of other variables, β_0 indicates the equation's intercept. In a quantile regression, the intercept indicates the estimated value of the response variable at the specified percentile level when all predictors are set to zero. It is not necessarily the mean of the response variable but rather the conditional quantile estimate. Regarding the study's independent variables, from subscript β_1 to β_5, each institutional dimension studied is represented. That is, β_1 represents the role of the State (st) in stakeholder engagement and serves to test hypothesis H1. β_2 represents the coefficient of variation of the dimension role of Financial Markets (fm) in stakeholder engagement and serves to test hypothesis H2. β_3 represents the coefficient of variation of the role of the Social Capital (sc) dimension in stakeholder engagement and serves to test hypothesis H3. β_4 represents the coefficient of variation of the role of the Human Capital (hc) dimension in stakeholder engagement and serves to test hypothesis H4. Finally, β_5 represents the coefficient of variation of the role of Corporate Governance (cg) in stakeholder engagement and serves to test hypothesis H5.

The control variables are utilized to complete the explanation of the equation. As a result, β_6 represents the Total Assets control variable for 2019, turned into a logarithmic function. The control variable associated with the sectors seen in the sample, the sensitive sectors indicated previously, is represented by the subscript β_7.

4.5 Research Design

Based on the discussion established in this and previous chapters, the general research design is presented in Table 9, which summarizes the methodological decisions set regarding the development of this doctoral dissertation. The research design shows the type of research approach, objectives, purpose, main concepts observed, research strategy, data collection, processing, and analysis techniques.

Table 9 - Research Design

Category	Decision to conduct the research
Research Objective	To analyze companies' stakeholder engagement actions considering their relations with the role of national institutions.
Specific Objectives	To investigate the scientific production on stakeholder engagement and varieties of institutional systems.
	To analyze the stakeholder engagement levels in non-financial reports of companies from countries categorized in the varieties of institutional systems.
	To examine the levels of stakeholder engagement of the analyzed companies relating to the influences of the institutional dimensions observed.
Main Concepts	Stakeholder Engagement (Stakeholder Theory)
	Institutional Dimensions (Varieties of Capitalism)
Research Strategy	Secondary data analysis
Data Collection Sources	GRI non-financial reports disclosed by sensitive sectors’ companies
	Varieties of Institutional Systems Framework
Data processing and analysis techniques	Content analysis using NVivo software for Stakeholder Engagement data on reports following the GRI Standards.
	Multivariate analysis through Quantile Regression technique using R software.

Source: Research data (2023)

Concluding the presentation of the characteristics adopted in the methodological procedures and the overview of the research design, the following chapter reveals the empirical results found in this investigation.

5 RESULTS

In the results chapter, we present the empirical findings of this doctoral dissertation. From this perspective, the chapter is divided, in argumentative terms, into five subtopics related to the topic of data analysis. Thus, we begin the presentation of findings by describing the study variables, followed by correlation analyses. After the results of the univariate and bivariate analyses, we describe the operationalizations of multivariate analyses with the quantile regression technique. This step has three subtopics, presenting the calculations of the dimensions in relation to the levels of stakeholder engagement in an individual, grouped, and, complementarily, general perspective. Finally, we end the chapter by testing the hypotheses based primarily on the findings found in the individual and grouped regressions.

5.1 Data Analyses

5.1.1 Description of Variables

Among the 211 companies in the sample, 37.4% are from the mineral resources sector (n = 79), 33.2% are from the energy sector – fossil fuels (n = 70), 23.2% are from the chemicals sector (n = 49), and 6.2% are from the applied resources sector (n = 13). As for the dimension of the role of the State, two factors of influence were computed, the State's direct dominance (64.5%, n = 136) and the State's indirect intervention (79.6%, n = 168). In the dimension of the role of Financial Markets, the factors of equity markets (23.2%, n = 49), credit markets (86.3%, n = 182), family wealth (45.5%, n = 96), and State-provided capital (25.1%, n = 53) were computed. In the dimension of the role of Social Capital, the factor generalized trust (26.1%, n = 55) was computed. In the dimension related to the role of Human Capital, the factors of knowledge capital (33.6%, n = 71) and coordination with labor (26.1%, n = 55) were computed. Finally, we have the dimension of the role of Corporate Governance, where the influence factors of ownership concentration (90.5%, n = 191), family ownership (68.2%, n = 144), and family intervention in management (81.5%, n = 172) were computed. Such information is summarized in Table 10.

Table 10 - Sample description

Variables	%	n
TRBC Mineral Resources	37,4%	79
TRBC Energy - Fossil Fuels	33,2%	70
TRBC Chemicals	23,2%	49
TRBC Applied Resources	6,2%	13
State Direct Dominance (sdd)	64,5%	136
Stade Indirect Intervention (sii)	79,6%	168

Coordination with Labor (cwl)	26,1%	55
Knowledge Capital (kc)	33,6%	71
Equity Markets (em)	23,2%	49
Credit Markets (cm)	86,3%	182
Family Wealth (fw)	45,5%	96
State-provided Capital (spc)	25,1%	53
Generalized Trust (gt)	26,1%	55
Ownership Concentration (oc)	90,5%	191
Family Ownership (fo)	68,2%	144
Family Intervention in Management (fim)	81,5%	172

Source: Research data (2023)

Following the description of the study variables, Table 11 presents values related to the levels of stakeholder engagement obtained in the content analysis stage and the five institutional dimensions analyzed after grouping their influence factors. It is important to mention that the directions of the effects of the influencing factors in their respective dimensions were defined based on an individual correlation analysis with each factor. In other words, we performed a correlation analysis with each dimension's influence factors to understand their pairwise relationships and enable their grouping in the respective dimensions. This interpretation finds an argumentative basis in Quivy and Campenhoudt (1998), who discuss the formation of dimensions considering their construction through specific indicators, understood here as the influencing factors observed in the previous table. In this perspective, the subsequent analyses in this study consider the weighting of the institutional dimensions based on their means since each dimension has different quantities of influencing factors.

Analyzing Table 11, the mean for stakeholder engagement in Level 1 was 8.7 (sd = 6.25) with a minimum of 1 and a maximum of 46; the mean for engagement in Level 2 was 7.8 (sd = 5.38) with a minimum of 0.5 and a maximum of 34.3; and, the average for engagement in Level 3 was 5 (sd = 3.64) with a minimum of 0.29 and a maximum of 21.71. Unlike the other variables, the Total Assets control variable has n = 205. Six companies could not be considered due to the non-availability of this information in the Refinitiv Eikon database for 2019. The average for Total Assets is 10.5 billion dollars with a median of 2.2 (sd = 29.7 billion). The minimum was 805 million, and the maximum was 298.7 billion dollars.

Table 11 - Descriptive statistics

	Mean	**sd**	**Q1**	**Q2**	**Q3**	**Min.**	**Max.**	**n**
Engag.Level1	8,70	6,25	4,8	7,0	10,7	1,0	46,0	211
Engag.Level2	7,80	5,38	3,8	6,7	10,1	0,5	34,3	211
Engag.Level3	5,00	3,64	2,5	4,3	6,5	0,3	21,7	211

State	1,44	0,81	1,0	2,0	2,0	0,0	2,0	211
Financial Markets	1,30	1,20	1,0	1,0	2,0	-1,0	3,0	211
Social Capital	0,26	0,44	0,0	0,0	1,0	0,0	1,0	211
Corporate Governance	1,04	0,41	1,0	1,0	1,0	0,0	2,0	211
Human Capital	0,60	0,65	0,0	1,0	1,0	0,0	2,0	211
Total Assets	1,05E+10	2,97E+10	4,20E+08	2,24E+09	8,31E+09	8,05E+05	2,99E+11	205

Source: Research data (2023)

Still considering the information in Table 11 and the grouping of factors influencing the institutional dimensions, we have the following data. First, regarding the dimension role of the State, the mean was 1.44 (sd = 0.81), with a minimum value of zero and a maximum value of 2. Second, regarding the dimension role of Financial Markets, the mean was 1.3 (sd = 1.2), with a minimum value of -1 and a maximum value of 3. The negative value was attributed to the SPC due to its negative effect on the other dimension factors, as perceived in the previous correlation between the factors. Third, as for the dimension role of Social Capital, the mean was 0.26 (sd = 0.44), with a minimum value of zero and a maximum of 1. Fourth, as for the role of the Corporate Governance dimension, the mean was 1.04 (sd = 0.41), with a minimum value of zero and a maximum of 2. Finally, as for the role of Human Capital, the mean was 0.6 (sd = 0.65), with a minimum value of zero and a maximum value of 2.

5.1.2 Correlation Analysis

Continuing with the quantitative investigations, we performed a correlation analysis to understand the covariations between the observed pairs of variables. Covariation occurs when one variable consistently and systematically varies in relation to another variable (Hair Jr. et al., 2015). The strength of this relationship is measured using the correlation coefficient, with large coefficients indicating a strong link and significant correlation.

Table 12 presents the correlations of the analyzed variables. In the Table, therefore, are the correlations between the variables of stakeholder engagement levels, the institutional dimensions already grouped, and the control variables related to sensitive sectors and total assets in 2019. The analysis description is then presented based on the rules on correlation coefficient sizes of Hair Jr. et al. (2015). Therefore, a correlation coefficient of zero means no linear relationship between two variables, while a correlation coefficient of -1 or +1 means that the linear relationship is perfect. The relationship's strength can be anywhere from -1 to +1. The closer the correlation coefficient is to ±1, the greater the relationship is. If the coefficient is a positive number, it means that the two variables relate directly. On the other hand, if the coefficient is a negative number, it means that the variables interact oppositely.

Thus, the following interpretations will be accepted considering the coefficient range strength of association (Hair Jr. et al., 2015): very strong when ± (0.91–1.00); high when ± (0.71–0.90); moderate when ± (0.41–0.70); small but definite relationship when ± (0.21–0.40); slight but may be meaningful when ± (0.10–0.20); unlikely to be a meaningful relationship when ± (0.00–0.10).

Table 12 - Correlation Analysis

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Engag.Level1	1,000	0,596	0,539	0,126	-0,061	0,142	-0,036	-0,094	0,039	0,380	0,034	0,334	0,109
2	Engag.Level2	0,596	1,000	0,661	0,068	-0,059	0,009	0,073	-0,025	0,103	0,475	-0,006	0,367	0,109
3	Engag.Level3	0,539	0,661	1,000	0,149	0,052	-0,009	-0,021	-0,051	0,057	0,378	0,038	0,519	0,225
4	Total Assets	0,126	0,068	0,149	1,000	-0,098	0,212	-0,089	-0,065	0,148	0,135	-0,116	0,202	-0,011
5	TRBC Mineral Resources	-0,061	-0,059	0,052	-0,098	1,000	-0,553	-0,417	-0,202	-0,120	-0,119	0,150	0,050	-0,055
6	TRBC Energy - Fossil Fuels	0,142	0,009	-0,009	0,212	-0,553	1,000	-0,383	-0,185	0,065	0,169	-0,154	0,033	0,099
7	TRBC Chemicals	-0,036	0,073	-0,021	-0,089	-0,417	-0,383	1,000	-0,140	0,121	-0,013	-0,045	-0,081	-0,069
8	TRBC Applied Resources	-0,094	-0,025	-0,051	-0,065	-0,202	-0,185	-0,140	1,000	-0,095	-0,069	0,078	-0,025	0,035
9	State	0,039	0,103	0,057	0,148	-0,120	0,065	0,121	-0,095	1,000	0,521	-0,771	0,320	-0,025
10	Financial Markets	0,380	0,475	0,378	0,135	-0,119	0,169	-0,013	-0,069	0,521	1,000	0,466	-0,549	-0,314
11	Social Capital	0,034	-0,006	0,038	-0,116	0,150	-0,154	-0,045	0,078	-0,771	0,466	1,000	-0,277	0,009
12	Corporate Governance	0,334	0,367	0,519	0,202	0,050	0,033	-0,081	-0,025	0,320	-0,549	-0,277	1,000	0,206
13	Human Capital	0,109	0,109	0,225	-0,011	-0,055	0,099	-0,069	0,035	-0,025	-0,314	0,009	0,206	1,000

Source: Research data (2023)

Considering the correlation analysis observed in Table 12, the variable related to the first level of stakeholder engagement has a moderate and positive correlation with the second level of engagement ($\rho = 0.596$) and with the third level ($\rho = 0.539$). Likewise, we noticed a moderate and positive correlation between levels 2 and 3 ($\rho = 0.661$).

As for the variables of the institutional dimensions and their correlations with the levels of engagement, we can highlight the role of Corporate Governance, which has the highest correlation coefficient, being moderate and positive with engagement level 3 ($\rho = 0.519$) and small, but defined, with levels 1 ($\rho = 0.334$) and 2 ($\rho = 0.367$). A similar association can be observed between the role of Financial Markets and levels of engagement since, considering level 2, there is a moderate and positive association ($\rho = 0.475$), while at levels 1 ($\rho = 0.380$) and 3 ($\rho = 0.378$) there are small but definite associations.

Concerning the bivariate analysis between levels of engagement and other institutional dimensions, it is observed that the role of Human Capital has a small but definite association with engagement level 3 ($\rho = 0.225$) while with levels 1 ($\rho = 0.109$) and 2 ($\rho = 0.109$), presents a slight association, but with significant potential. As for the dimensions of the roles of the State and Social Capital, the correlation coefficients show low intensities, with only the role of the State presenting a slight association with level 2 ($\rho = 0.103$) but with significant potential.

On the other hand, it is also worth mentioning correlations found between pairs of variables of institutional dimensions. The correlation coefficient between the roles of the State and Social Capital have a high association, despite being negative ($\rho = -0.771$). Social Capital still shows a moderate and positive correlation of strength with the dimension of the Financial Markets ($\rho = 0.446$). The role of the State also offers a moderate and positive association with the role of Financial Markets ($\rho = 0.521$) and a small but definite association with the role of Corporate Governance ($\rho = 0.320$). As for this last dimension, it is also possible to mention its moderate association, but in a negative sense, with the role of Financial Markets ($\rho = -0.549$) and also a small but definite and negative association with the dimension of Social Capital ($\rho = -0.277$). As for the role of Human Capital, small but defined associations stand out with the roles of Financial Markets ($\rho = -0.314$) in a negative sense and Corporate Governance ($\rho = 0.206$) in a positive sense.

Starting with the next topic, we present the multivariate analyses performed to understand the influences of the institutional dimensions on the companies' stakeholder engagement actions, taking into account each of the three levels of engagement studied. In this manner, the effects of the dimensions are examined separately for each level of engagement, followed by analytic models that aggregate the dimensions in order to resemble empirical reality as closely as possible. We believe that by doing so, we can debate whether each hypothesis proposed in this thesis is supported.

5.1.3 Relationship between Institutional Dimensions and Stakeholder Engagement

Entering the multivariate analyses of the study and considering how to test the proposed hypotheses, it is necessary to observe the context of the relationships between the institutional dimensions categorized by Fainshmidt et al. (2018) and the levels of engagement defined by Stocker et al. (2020). In this perspective, the following paragraphs describe the results found in the influence analyses of each institutional dimension individually with each engagement level.

We performed the multivariate technique of quantile regression, as it is likely that institutional dimensions have different impacts on the distribution of each level of stakeholder engagement. In other words, we understand that, due to the macro nature of the dimensions, it is possible that their influences do not only occur in an overall perspective for each level of engagement, being necessary to observe the nuances of the effects. That is, the institutional dimensions may influence the engagement actions of companies at different intensities of adopting these actions in each of the three levels of stakeholder engagement. Quantile regression allows us to operationalize such reflection. We estimated the quantiles 10, 25, 50, 75, and 90 for this purpose.

The Tables below show the findings of the technique adopted individually for each dimension as an independent variable and engagement levels as a dependent variable. The quantile regression model is justified when considering that the variables used in this thesis may present evident discrepancies in different intensities of engagement within the levels established in previous literature. Furthermore, using such a model makes the results more robust when observing the response of each quantile. It uses the conditional median as a central tendency measure, making the regression more robust in response to outliers. In other words, from the quantile regressions, it is possible to observe the response of each quantile, while in the Ordinary Least Squares regression, there is only one regression line around the mean, which may blur significant distributive effects.

As observed in the Tables below, models 2, 3, and 4 are estimated based on quartiles; that is, they refer to the positions of the first (Q1, 25%), second (Q2, 50% or median), and third (Q3, 75%) quartiles. Complementarily, we insert the most extreme positions of 10% and 90%.

As mentioned, such positions are understood in this work as intensities within stakeholder engagement levels. Based on the content analysis results, the intensity of engagement levels refers to a greater or lesser amount of engagement actions. The intercept in all models captures the joint effect of reference categories. The sector and the logarithm of total assets in 2019 were used as control variables, as they may contain aspects that overlap with the variables of interest that need their effects separated within the estimated models.

From this perspective, considering the dimension related to hypothesis H1, we can reveal the results found for the role of the State in stakeholder engagement. Table 13 presents the findings for this dimension related to each level of engagement.

Table 13 - Quantile Regression for the Role of the State Dimension and Stakeholder Engagement Levels

	0.10			**0.25**			**0.50**			**0.75**			**0.90**		
	β	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**P**	**sig.**	**β**	**p**	**sig.**
Level 1															
(Intercept)	1.1	0.773		2.8	0.540		6.6	0.205		8.4	0.121		10.6	0.125	
Chemicals	0.2	0.901		1.1	0.525		0.9	0.651		3.4	0.075	.	4.9	0.016	*
Energy - Fossil F.	0.0	0.987		1.2	0.462		1.0	0.612		5.1	0.016	*	9.8	0.001	***
Mineral Resources	-0.3	0.796		1.0	0.514		0.7	0.720		3.4	0.051	.	6.0	0.002	**
Total Assets	0.1	0.509		0.1	0.690		0.0	0.987		0.0	0.915		-0.2	0.643	
State	-0.3	0.488		-0.5	0.314		-0.2	0.780		-0.4	0.548		1.9	0.031	*
Level 2															
(Intercept)	-1.8	0.648		-0.5	0.905		-2.5	0.615		2.6	0.621		6.7	0.276	
Chemicals	0.5	0.768		0.6	0.723		1.2	0.525		3.0	0.139		0.8	0.771	
Energy - Fossil F.	0.5	0.715		-1.4	0.369		-0.8	0.673		2.7	0.211		3.9	0.191	
Mineral Resources	0.1	0.941		-1.6	0.312		0.6	0.759		1.3	0.478		0.4	0.869	
Total Assets	0.2	0.224		0.3	0.164		0.4	0.083	.	0.2	0.470		0.2	0.597	
State	-0.2	0.672		-0.4	0.465		0.1	0.909		0.8	0.159		2.5	0.002	**
Level 3															
(Intercept)	-1.8	0.446		-0.7	0.802		0.3	0.923		-0.4	0.909		5.9	0.155	
Chemicals	0.7	0.453		1.0	0.418		-0.2	0.908		0.0	0.985		0.6	0.622	
Energy - Fossil F.	-0.3	0.754		0.0	0.988		-0.8	0.525		0.2	0.861		1.4	0.352	
Mineral Resources	-0.6	0.541		-0.1	0.950		-0.3	0.828		1.3	0.325		3.1	0.037	*
Total Assets	0.2	0.065	.	0.2	0.161		0.2	0.125		0.3	0.088	.	0.0	1.000	
State	-0.3	0.377		-0.3	0.444		-0.2	0.577		0.6	0.169		1.1	0.024	*

Source: Research data (2023)

Based on the data in Table 13, we realize that the dimension related to the role of the State presents sufficient and strong evidence of positive influence for the three levels of stakeholder engagement. That is, based on empirical observation, the institutional dimension of the role of the State in emerging and middle-income countries increases the stakeholder engagement of companies that operate with high intensities of engagement actions at levels 1 ($\beta = 1.9$; p-value < 0.05), 2 ($\beta = 2.5$; p-value < 0.01) and 3 ($\beta = 1.1$; p-value < 0.05).

About the dimension related to hypothesis H2, we can discuss the results found for the role of Financial Markets in stakeholder engagement. Table 14 presents the findings for each level of engagement.

Table 14 - Quantile Regression for the role of Financial Markets Dimension and Stakeholder Engagement Levels

	0.10			0.25			0.50			0.75			0.90		
	β	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**
Level 1															
(Intercept)	-0.2	0.963		5.7	0.189		2.4	0.625		13.7	0.006	**	12.9	0.026	*
Chemicals	0.0	0.998		0.3	0.856		0.2	0.913		1.8	0.308		4.7	0.007	**
Energy - Fossil F.	-0.2	0.894		0.3	0.848		-0.1	0.933		1.3	0.440		6.8	0.008	**
Mineral Resources	0.1	0.919		0.3	0.846		0.3	0.881		2.9	0.076	.	4.2	0.003	**
Total Assets	0.2	0.358		0.0	1.000		0.3	0.171		-0.1	0.714		0.0	0.973	
Financial Markets	0.1	0.843		0.7	0.156		1.3	0.006	**	2.1	0.000	***	2.1	0.000	***
Level 2															
(Intercept)	-0.2	0.957		2.2	0.606		0.6	0.898		9.1	0.102		22.8	0.003	**
Chemicals	-0.3	0.816		0.2	0.890		1.4	0.448		0.7	0.746		0.4	0.871	
Energy - Fossil F.	-1.3	0.289		-1.5	0.345		-1.1	0.509		-0.4	0.873		2.2	0.434	
Mineral Resources	-1.5	0.226		-1.2	0.446		0.6	0.705		0.1	0.947		-1.1	0.631	
Total Assets	0.3	0.111		0.2	0.228		0.4	0.075	.	0.2	0.432		-0.2	0.498	
Financial Markets	1.0	0.019	*	1.4	0.002	**	1.6	0.000	***	2.3	0.000	***	2.9	0.000	***
Level 3															
(Intercept)	-1.9	0.455		0.2	0.934		0.0	0.994		1.1	0.682		5.0	0.171	
Chemicals	0.8	0.458		0.7	0.555		0.2	0.890		-0.3	0.839		0.6	0.584	
Energy - Fossil F.	-0.3	0.787		-0.2	0.846		-0.6	0.603		-1.4	0.248		0.0	0.973	
Mineral Resources	-0.3	0.738		-0.2	0.882		0.1	0.963		0.4	0.738		2.8	0.028	*
Total Assets	0.2	0.099	.	0.1	0.290		0.3	0.052	.	0.4	0.008	**	0.3	0.150	
Financial Markets	0.0	0.923		0.2	0.536		0.7	0.023	*	1.4	0.000	***	2.0	0.000	***

Source: Research data (2023)

As for the Financial Markets, we observe a more robust pattern of influence that also operates in actions of the three levels of engagement studied. This way, its effect on stakeholder engagement level 1 is established in three intensities. At intermediate intensity, we noticed strong evidence of positive influence (50%, $\beta = 1.3$; p-value < 0.01). At higher intensities, there is also evidence, this time of a very strong nature, of a positive influence on level 1 engagement actions [75% ($\beta = 2.1$; p-value < 0.001); 90% ($\beta = 2.1$; p-value < 0.001)]. For level 2, the dimension remains with evidence of positive influence, this time in all analyzed intensities. Such evidence appears to be sufficient and strong at the lowest levels and very strong at the intermediate and highest levels [10% ($\beta = 1.0$; p-value < 0.05); 25% ($\beta = 1.4$; p-value < 0.01); 50% ($\beta = 1.6$; p-value < 0.001); 75% ($\beta = 2.3$; p-value < 0.001); 90% ($\beta = 2.9$; p-value < 0.001)]. Finally, at level 3, the role of Financial Markets maintains the pattern of influence observed at the first level, with sufficient and very strong evidence at intermediate and higher levels [50% ($\beta = 0.7$; p-value < 0.05; 75% ($\beta = 1.4$; p-value < 0.001); 90% ($\beta = 2.0$; p-value < 0.001)].

The third dimension studied is related to hypothesis H3. Therefore, Table 15 presents the findings for the influences of the role of Human Capital for each level of engagement.

Table 15 - Quantile Regression for the role of Human Capital Dimension and Levels of Stakeholder Engagement

	0.10			0.25			0.50			0.75			0.90		
	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.
Level 1															
(Intercept)	0.1	0.985		3.6	0.453		4.1	0.451		8.3	0.129		18.9	0.011	*
Chemicals	0.1	0.947		0.8	0.637		1.2	0.539		3.9	0.024	*	5.5	0.015	*
Energy - Fossil F.	0.0	0.987		0.9	0.593		1.1	0.565		5.2	0.007	**	9.6	0.000	***
Mineral Resources	0.4	0.759		1.0	0.543		0.9	0.635		4.1	0.015	*	4.9	0.011	*
Total Assets	0.1	0.455		0.0	0.981		0.1	0.784		-0.1	0.614		-0.6	0.081	.
Human Capital	-0.3	0.560		0.4	0.514		0.6	0.444		1.7	0.116		6.6	0.001	**
Level 2															
(Intercept)	-2.0	0.592		-0.7	0.869		-5.4	0.260		5.3	0.302		6.8	0.318	
Chemicals	0.4	0.814		0.6	0.720		1.5	0.406		1.0	0.652		4.8	0.080	.
Energy - Fossil F.	0.4	0.787		-2.1	0.170		-0.3	0.864		0.7	0.748		5.5	0.060	.
Mineral Resources	-0.3	0.838		-2.4	0.120		1.6	0.361		0.2	0.940		3.7	0.134	
Total Assets	0.2	0.228		0.3	0.175		0.5	0.027	*	0.1	0.623		0.2	0.649	
Human Capital	0.5	0.296		0.5	0.417		1.4	0.051	.	2.3	0.028	*	1.8	0.282	
Level 3															
(Intercept)	-2.1	0.402		-0.7	0.803		-0.1	0.985		-2.3	0.419		0.9	0.836	
Chemicals	0.7	0.487		0.9	0.446		-0.5	0.667		0.5	0.603		3.4	0.023	*
Energy - Fossil F.	-0.3	0.735		0.0	0.973		-1.3	0.277		0.1	0.932		2.1	0.073	.
Mineral Resources	-0.4	0.713		0.0	0.987		-1.0	0.422		1.7	0.152		3.9	0.002	**
Total Assets	0.2	0.088	.	0.1	0.212		0.2	0.095	.	0.3	0.018	*	0.2	0.363	
Human Capital	0.0	0.925		0.3	0.437		1.1	0.020	*	1.8	0.001	**	1.9	0.017	*

Source: Research data (2023)

Regarding the role of Human Capital, we noticed evidence of a positive influence in the three levels of engagement, despite not observing a clear pattern as in the previous dimensions. Even so, we note strong evidence of a positive influence at the highest intensity of level 1 (90%, $\beta = 6.6$; p-value < 0.01). At level 2, we noticed sufficient positive evidence in the intensity of the third quartile (75%, $\beta = 2.3$; p-value < 0.05). While level 3 presents sufficient and strong evidence of a positive influence from intermediate to higher intensities [50% ($\beta = 1.1$; p-value < 0.05); 75% ($\beta = 1.8$; p-value < 0.01); 90% ($\beta = 1.9$; p-value < 0.05)].

Concerning the dimension related to hypothesis H4, we can discuss the results found for the role of Social Capital in stakeholder engagement. Table 16 presents the findings for each level of engagement.

Table 16 - Quantile Regression for the role of Social Capital Dimension and Stakeholder Engagement Levels

	0.10			0.25			0.50			0.75			0.90		
	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.
Level 1															

	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.	β	p	sig.
(Intercept)	2.3	0.541		1.0	0.829		4.1	0.429		4.1	0.448		13.0	0.086	.
Chemicals	-0.1	0.923		1.1	0.501		1.2	0.528		2.9	0.112		5.6	0.011	*
Energy - Fossil F.	0.1	0.948		1.1	0.473		1.4	0.480		4.7	0.024	*	9.2	0.003	**
Mineral Resources	-0.5	0.640		0.7	0.656		1.3	0.470		2.7	0.121		5.6	0.006	**
Total Assets	0.0	0.875		0.1	0.556		0.1	0.808		0.1	0.584		-0.1	0.834	
Social Capital	1.7	0.045	*	1.7	0.085	.	1.6	0.175		1.5	0.226		-3.3	0.064	.
Level 2															
(Intercept)	-2.0	0.584		-0.8	0.855		-3.7	0.453		2.6	0.624		7.1	0.322	
Chemicals	0.7	0.647		0.7	0.661		1.2	0.534		2.5	0.238		2.9	0.355	
Energy - Fossil F.	0.5	0.693		-0.4	0.802		-0.9	0.634		2.1	0.367		5.8	0.096	.
Mineral Resources	-0.2	0.904		-1.3	0.404		0.6	0.748		0.8	0.674		1.7	0.581	
Total Assets	0.2	0.218		0.2	0.283		0.5	0.041	*	0.3	0.291		0.3	0.431	
Social Capital	1.1	0.179		1.7	0.103		0.4	0.703		-0.2	0.839		-0.7	0.742	
Level 3															
(Intercept)	-1.3	0.558		-2.7	0.347		-0.2	0.935		1.2	0.712		4.7	0.298	
Chemicals	0.6	0.506		1.3	0.288		0.0	0.978		0.0	0.991		1.4	0.285	
Energy - Fossil F.	-0.3	0.715		0.4	0.761		-1.0	0.436		0.4	0.787		1.8	0.255	
Mineral Resources	-0.5	0.551		-0.2	0.898		-0.6	0.634		1.5	0.300		3.3	0.042	*
Total Assets	0.1	0.132		0.2	0.065	.	0.2	0.104		0.2	0.161		0.1	0.580	
Social Capital	1.3	0.006	**	1.3	0.030	*	0.9	0.179		-0.2	0.838		-0.2	0.832	

Source: Research data (2023)

In the case of perceived influences on the role of countries' Social Capital in stakeholder engagement actions, we observed little evidence when considering the three levels of engagement. From this perspective, we note sufficient evidence of positive influence at the lowest intensity of level 1 (10%, $\beta = 1.7$; p-value < 0.05). As for level 2, we did not find evidence of the influence of the role of social capital in any of the intensities. Level 3 shows strong and sufficient evidence of positive influences, although it is also only at the lowest intensities [10% ($\beta = 1.3$; p-value < 0.01); 25% ($\beta = 1.3$; p-value < 0.05)]

Finally, considering the last dimension, which is related to hypothesis H5, we can discuss the results found for the role of Corporate Governance in stakeholder engagement. Table 17 presents the findings for each level of engagement.

Table 17 - Quantile Regression for the role of Corporate Governance Dimension and Levels of Stakeholder Engagement

	0.10			0.25			0.50			0.75			0.90		
	β	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**
Level 1															
(Intercept)	-0.3	0.940		4.9	0.336		0.8	0.885		5.6	0.273		9.1	0.165	
Chemicals	0.2	0.867		0.6	0.704		1.2	0.556		3.5	0.050	.	4.4	0.064	.
Energy - Fossil F.	0.5	0.688		0.5	0.749		0.9	0.633		4.2	0.025	*	8.0	0.021	*
Mineral Resources	-0.1	0.948		0.3	0.825		0.5	0.776		3.4	0.039	*	2.2	0.277	
Total.Assets	0.1	0.586		-0.1	0.514		-0.1	0.843		-0.2	0.479		-0.1	0.692	
Corp. Governance	1.2	0.644		2.4	0.382		6.6	0.004	**	5.4	0.000	***	4.8	0.000	***
Level 2															
(Intercept)	-5.2	0.186		-1.6	0.716		-3.5	0.472		-0.2	0.976		4.4	0.451	
Chemicals	0.6	0.741		-0.2	0.924		0.9	0.666		1.9	0.432		2.3	0.314	
Energy - Fossil F.	0.5	0.740		-2.2	0.178		-0.9	0.632		-1.1	0.653		4.4	0.120	

Mineral Resources	0.1	0.933		-2.0	0.220		0.1	0.939		-1.2	0.582		-0.5	0.801	
Total.Assets	0.2	0.341		0.2	0.345		0.3	0.201		0.3	0.287		0.1	0.708	
Corp. Governance	3.9	0.062	.	3.2	0.123		3.6	0.029	*	4.9	0.000	***	5.8	0.000	***
Level 3															
(Intercept)	-4.1	0.162		-3.5	0.274		0.6	0.846		0.6	0.860		0.7	0.841	
Chemicals	0.6	0.526		0.4	0.686		0.1	0.947		1.5	0.189		1.6	0.141	
Energy - Fossil F.	-0.4	0.701		-0.5	0.624		-0.3	0.810		1.4	0.212		2.1	0.102	
Mineral Resources	-0.4	0.681		-0.4	0.684		0.0	0.988		2.3	0.057	.	2.8	0.025	*
Total.Assets	0.2	0.121		0.2	0.212		0.1	0.553		0.1	0.691		0.1	0.743	
Corp. Governance	2.3	0.112		3.2	0.019	*	2.1	0.022	*	3.0	0.000	***	5.0	0.000	***

Source: Research data (2023)

According to the data presented in Table 17, Corporate Governance's role behaves similarly to that of Financial Markets concerning stakeholder engagement. In this way, the dimension of Corporate Governance reveals relative robustness of influence following a pattern maintained for the three levels of engagement studied. Therefore, its influence on engagement level 1 is established in three intensities. At intermediate intensity, we perceive that there is strong evidence of a positive influence (50%, $\beta = 6.6$; p-value < 0.01), while at this same level, there is also evidence, of a very strong nature, of a positive influence on the actions of engagement [75% ($\beta = 5.4$; p-value < 0.001); 90% ($\beta = 4.8$; p-value < 0.001)]. For level 2, the dimension remains with evidence of positive influence at the same intensities as the previous level. Furthermore, such evidence appears to be sufficient at the intermediate level (50%, $\beta = 3.6$; p-value < 0.05) and very strong at the highest levels [75% ($\beta = 4.9$; p-value < 0.001); 90% ($\beta = 5.8$; p-value < 0.001)]. Finally, at level 3, the Corporate Governance dimension maintains the tendency of influence, with sufficient evidence in the first and second quartiles [25% ($\beta = 3.2$; p-value < 0.05; 50% ($\beta = 2.1$; p-value < 0.05] and very strong at higher intensities [75% ($\beta = 3.0$; p-value < 0.001); 90% ($\beta = 5.0$; p-value < 0.001)].

Upon analyzing each individual dimension, it is noteworthy to observe the significant coefficients of variation (β) displayed. Notably, the role of Corporate Governance stands out with the highest values, suggesting a stronger potential impact on stakeholder engagement initiatives when compared to other dimensions.

5.1.4 Group Analysis of Institutional Dimensions Related to Stakeholder Engagement

Given our observations and views on the evidence of the separate dimensions' influence, we believe it is necessary to group the effects of the dimensions with influences following patterns that have more theoretical and empirical reliability. As a result, we developed a combined analysis model that took into account the effects of the dimensions of the State, Financial Markets, and Corporate Governance roles for each level of stakeholder engagement in the sample companies. The results of our analysis are presented in Table 18, which demonstrates the quantile regression model developed by grouping the three dimensions mentioned in relation to the dependent variable of stakeholder engagement levels.

Table 18 - Quantile Regression Considering the State, Financial Markets, and Corporate Governance Dimensions in Relation to the Stakeholder Engagement Levels

	0.10					0.25					0.50					0.75					0.90				
	β	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**
Engagement - Level 1																									
(Intercept)	-0.5	4.6	-0.1	0.912		3.8	4.5	0.8	0.400		2.5	4.7	0.5	0.601		15.4	5.2	3.0	0.004	**	10.3	5.4	1.9	0.055	.
TRBCChemicals	0.3	1.4	0.2	0.841		-0.3	1.4	-0.2	0.815		1.5	1.7	0.9	0.386		2.3	2.0	1.2	0.233		5.8	2.0	3.0	0.003	**
TRBCEnergy-FossilFuels	0.5	1.3	0.4	0.715		-0.5	1.4	-0.4	0.704		1.2	1.6	0.7	0.469		2.4	1.9	1.2	0.222		5.9	2.2	2.7	0.009	**
TRBCMineralResources	-0.4	1.3	-0.3	0.781		-0.6	1.4	-0.4	0.656		0.8	1.5	0.5	0.597		1.6	1.8	0.9	0.381		3.2	1.5	2.2	0.033	*
log(Total.Assets.2019)	0.1	0.2	0.5	0.647		0.1	0.2	0.5	0.649		0.3	0.2	1.2	0.223		-0.2	0.2	-0.8	0.442		0.2	0.3	0.9	0.375	
State	-0.4	0.5	-0.7	0.483		-0.8	0.6	-1.4	0.156		-1.4	0.6	-2.2	0.027	*	-2.4	0.7	-3.3	0.001	**	-2.8	0.8	-3.3	0.001	**
Financial Markets	-0.1	0.4	-0.3	0.738		1.1	0.5	2.4	0.018	*	1.6	0.5	3.4	0.001	***	2.2	0.5	4.5	0.000	***	3.2	0.6	5.5	0.000	***
Corporate Governance	1.9	2.9	0.7	0.502		2.8	2.3	1.2	0.221		2.4	1.0	2.4	0.014	*	3.9	1.4	2.7	0.007	**	2.8	1.1	2.5	0.009	**
Engagement - Level 2																									
(Intercept)	0.1	3.4	0.0	0.975		-0.5	4.2	-0.1	0.910		1.3	5.0	0.3	0.791		11.0	5.3	2.1	0.041	*	19.0	7.5	2.5	0.013	*
TRBCChemicals	-1.0	1.3	-0.7	0.461		0.7	1.5	0.4	0.661		0.7	1.7	0.4	0.677		1.5	1.9	0.8	0.447		2.9	2.5	1.2	0.246	
TRBCEnergy-FossilFuels	-1.4	1.1	-1.3	0.195		-1.4	1.4	-1.0	0.342		-0.8	1.7	-0.5	0.618		-0.7	1.8	-0.4	0.704		1.4	2.2	0.6	0.521	
TRBCMineralResources	-1.5	1.1	-1.4	0.174		-1.1	1.4	-0.8	0.417		0.2	1.6	0.1	0.905		-0.5	1.7	-0.3	0.766		0.1	1.8	0.1	0.946	
log(Total.Assets.2019)	0.2	0.2	1.3	0.212		0.3	0.2	1.6	0.105		0.4	0.2	1.7	0.091	.	0.2	0.2	0.8	0.442		0.1	0.3	0.3	0.766	
State	-1.0	0.5	-2.0	0.042	*	-1.5	0.6	-2.8	0.006	**	-1.2	0.5	-2.2	0.006	**	-2.2	0.7	-3.3	0.001	**	-2.1	0.8	-2.5	0.012	*
Financial Markets	0.9	0.4	2.2	0.029	*	1.3	0.5	2.7	0.007	**	1.9	0.5	3.8	0.000	***	2.7	0.5	5.6	0.000	***	3.8	0.6	6.1	0.000	***
Corporate Governance	2.4	1.8	1.3	0.184		2.9	1.8	1.6	0.104		1.8	0.8	2.2	0.022	*	1.8	0.9	2.1	0.016	*	1.7	0.7	2.4	0.009	**
Engagement - Level 3																									
(Intercept)	-3.4	2.8	-1.2	0.222		-2.5	3.0	-0.8	0.399		-1.0	2.8	-0.3	0.730		-0.1	2.8	0.0	0.963		1.0	3.4	0.3	0.778	
TRBCChemicals	0.8	0.8	0.9	0.369		0.6	0.9	0.6	0.544		0.2	1.2	0.1	0.891		0.7	1.1	0.6	0.569		2.1	1.1	1.9	0.055	.
TRBCEnergy-FossilFuels	-0.4	0.8	-0.5	0.610		-0.8	0.9	-0.9	0.368		-0.4	1.2	-0.3	0.728		-1.0	1.1	-0.9	0.395		2.2	1.3	1.7	0.093	.
TRBCMineralResources	-0.9	0.8	-1.1	0.286		-0.9	0.9	-0.9	0.352		-0.2	1.1	-0.2	0.830		1.6	1.2	1.3	0.183		2.8	1.1	2.5	0.012	*
log(Total.Assets.2019)	0.2	0.1	1.9	0.054	.	0.2	0.1	1.9	0.060	.	0.3	0.1	2.5	0.015	*	0.3	0.1	2.2	0.026	*	0.2	0.2	1.0	0.315	
State	-0.6	0.3	-1.7	0.088	.	-0.9	0.4	-2.5	0.014	*	-1.2	0.4	-3.0	0.004	**	-0.9	0.4	-2.2	0.026	*	-1.1	0.5	-2.1	0.038	*
Financial Markets	0.0	0.2	0.1	0.890		0.2	0.3	0.7	0.511		0.9	0.3	2.7	0.007	**	1.4	0.4	3.7	0.000	***	1.1	0.4	2.4	0.019	*
Corporate Governance	2.2	1.2	1.9	0.064	.	2.7	1.1	2.5	0.014	*	2.0	0.8	2.3	0.021	*	2.6	0.8	3.1	0.002	**	4.8	1.0	5.0	0.000	***

Source: Research data (2023)

As noted in Table 18, it is possible to discuss the grouped effects of the three dimensions analyzed for each level of stakeholder engagement. From this perspective, we noticed that all dimensions maintain significant coefficients, showing sufficient, strong, or very strong influences on all levels of stakeholder engagement, with emphasis on the intermediate intensities and the two highest at each level. It should be noted that at level 2, besides the Financial Markets, the State now has evidence of influence at all intensities.

Financial Markets and Corporate Governance continue to show evidence of positive influence at all levels, proving to have the most robust and stable positive effects on stakeholder engagement practices among the five dimensions investigated. In this perspective, the evidence of positive influences of both highlighted dimensions is worth mentioning. First, the role of the Financial Markets presents evidence in different intensities of engagement level 1 [25% (β = 1.1; p-value < 0.05); 50% (β = 1.6; p-value < 0.001); 75% (β = 2.2; p-value < 0.001); 90% (β = 3.2; p-value < 0.001)], level 2 [10% (β = 0.9; p-value < 0.05); 25% (β = 1.3; p-value < 0.01); 50% (β = 1.9; p-value < 0.001); 75% (β = 2.7; p-value < 0.001); 90% (β = 3.8; p-value < 0.001)], and level 3 [50% (β = 0.9; p-value < 0.01); 75% (β = 1.4; p-value < 0.001); 90% (β = 1.1; p-value < 0.05)]. Second, the role of Corporate Governance, with evidence also present in different intensities of level 1 [50% (β = 2.4; p-value < 0.05); 75% (β = 3.9; p-value < 0.01); 90% (β = 2.8; p-value < 0.01)], level 2 [50% (β = 1.8; p-value < 0.05); 75% (β = 1.8; p-value < 0.05); 90% (β = 1.7; p-value < 0.01)], and level 3 [25% (β = 2.7; p-value < 0.05); 50% (β = 2.0; p-value < 0.05); 75% (β = 2.6; p-value < 0.01); 90% (β = 4.8; p-value < 0.001)].

It should also be noted that, considering the significant variation coefficients presented. The dimension of the role of Corporate Governance continues to stand out with higher values from a general perspective, maintaining the suggestion of having a more substantial impact on stakeholder engagement initiatives even when the effects of other dimensions are analyzed together.

However, it is worth mentioning the change in the direction of influence of the Role of the State, which, analyzed together with the effects of the roles of Financial Markets and Corporate Governance, assumes a negative influence on all levels of stakeholder engagement. Such influence is observed in all intensities in which it presented a significant coefficient. In other words, in this grouped analysis, the role of the State behaves with adverse effects on stakeholder engagement levels 1 [50% (β = -1.4; p-value < 0.05); 75% (β = -2.4; p-value < 0.01); 90% (β = -2.8; p-value < 0.01)], level 2 [10% (β = -1.0; p-value < 0.05); 25% (β = -1.5;

p-value < 0.01); 50% (β = -1.2; p-value < 0.01); 75% (β = -2.2; p-value < 0.01); 90% (β = -2.1; p-value < 0.05)], and level 3 [25% (β = -0.9; p-value < 0.05); 50% (β = -1.2; p-value < 0.01); 75% (β = -0.9; p-value < 0.05); 90% (β = -1.1; p-value < 0.05)]. This unexpected behavior during the study's operationalization may result in the proposed hypothesis related to the State's role being unsupported. As such, the topic of hypothesis testing will be explored further.

As mentioned, the three dimensions analyzed have shown the most significant influence on company engagement actions in emerging and middle-income markets. Therefore, to interpret the data accurately, the hypothesis test will focus primarily on the findings presented in the previous table. However, as a consequence of the perceived changes in the State's influence on stakeholder engagement, we see it as necessary to analyze the possible implications of the dimensions omitted in the analysis of the previously grouped model. As observed in the correlations stage, one of the most prominent relationships between pairs of dimensions was between the State and Social Capital dimensions. Another example, still considering the correlations between dimensions, is the association of moderate strength between Social Capital and Financial Markets. Human Capital, the second dimension not covered in the preceding model, shows definite relationships, at least with Financial Markets and Corporate Governance. In this way, such relationships may have an impact on the influences perceived in the grouped model shown in Table 18.

Based on these observations, the following topic provides complementary models, which involve grouping all institutional dimensions, even the ones with no clear pattern of effect, and assessing their influences on stakeholder engagement levels jointly. Exploring additional data can provide valuable insights and direction for future research endeavors.

5.1.5 Complementary Analysis

Concerning the understanding of the complementary model regarding the effects of all institutional dimensions together, we continue with the use of the quantile regression technique since, in the same way observed in the previous topic, it is likely that the dimensions have different impacts on the distribution of each level of stakeholder engagement. To this end, following the previous pattern, the five quantiles are estimated as shown in Table 19.

It is worth mentioning that other complementary groupings were executed before utilizing the model with all dimensions. For instance, we grouped four dimensions (Appendix K) while excluding Human Capital, which showed little significance in the comprehensive model. However, we observed that even though it is a minor dimension in our investigation, it still has a residual impact on the others when analyzed together. Therefore, we proceeded with the complementary analysis while considering all dimensions.

Table 19 - Quantile Regression for Institutional Dimensions and Stakeholder Engagement Levels

	0,10					0,25					0,50					0,75					0,90				
	β	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**	**β**	**se**	**t**	**p**	**sig.**
Engagement – Level 1																									
(Intercept)	3,1	4,0	0,8	0,442		0,8	4,4	0,2	0,846		2,5	4,6	0,5	0,587		11,0	5,1	2,2	0,031	*	12,1	5,4	2,2	0,026	*
TRBC Chemicals	-0,9	1,4	-0,6	0,543		0,6	1,5	0,4	0,678		0,4	1,6	0,2	0,805		1,4	1,8	0,8	0,445		5,2	2,0	2,6	0,009	**
TRBC Energy-Fossil Fuels	0,5	1,3	0,4	0,683		1,3	1,5	0,9	0,379		1,1	1,6	0,7	0,488		2,0	1,8	1,1	0,271		5,8	2,2	2,6	0,011	*
TRBC Mineral Resources	-0,5	1,2	-0,4	0,689		0,1	1,5	0,1	0,957		0,3	1,5	0,2	0,840		1,1	1,7	0,7	0,510		2,8	1,5	1,8	0,069	.
log(Total.Assets.2019)	-0,1	0,2	-0,6	0,559		0,0	0,2	0,0	0,966		0,1	0,2	0,5	0,589		0,0	0,2	0,1	0,942		0,1	0,3	0,4	0,688	
State	1.0	0.7	1.4	0.168		1.0	0.7	1.3	0.194		0.7	0.9	0.8	0.440		1.5	0.7	2.3	0.008	**	2.1	1.1	2.0	0.048	*
Financial Markets	0.7	0.5	1.5	0.147		1.1	0.5	2.3	0.025	*	1.9	0.5	3.6	0.000	***	2.6	0.5	4.9	0.000	***	3.2	0.7	4.9	0.000	***
Corporate Governance	1.7	2.5	0.7	0.496		3.5	2.2	1.6	0.119		2.8	1.3	2.1	0.008	**	3.1	1.4	2.2	0.003	**	2.8	1.3	2.2	0.010	**
Social Capital	3.2	1.4	2.3	0.022	*	4.5	1.4	3.2	0.002	**	4.9	1.5	3.2	0.001	**	3.0	1.5	1.9	0.054	.	2.8	1.7	1.6	0.109	
Human Capital	-0.5	0.5	-1.0	0.309		-0.9	0.6	-1.4	0.151		-0.7	0.8	-0.9	0.362		-0.4	1.1	-0.4	0.700		-0.9	1.5	-0.6	0.564	
Engagement – Level 2																									
(Intercept)	-0,1	3,4	0,0	0,977		-1,1	4,2	-0,3	0,797		-0,4	4,9	-0,1	0,935		11,1	5,5	2,0	0,043	*	22,6	7,1	3,2	0,002	**
TRBC Chemicals	-0,3	1,2	-0,3	0,798		0,8	1,4	0,5	0,600		1,3	1,8	0,7	0,461		1,1	2,0	0,5	0,589		1,3	2,2	0,6	0,558	
TRBC Energy-Fossil Fuels	-1,2	1,1	-1,0	0,300		-1,0	1,4	-0,7	0,487		0,0	1,8	0,0	0,978		-0,7	1,9	-0,4	0,710		0,6	2,0	0,3	0,756	
TRBC Mineral Resources	-1,4	1,0	-1,4	0,178		-0,8	1,3	-0,6	0,545		0,2	1,7	0,1	0,890		-1,0	1,8	-0,6	0,574		0,2	1,8	0,1	0,899	
log(Total.Assets.2019)	0,1	0,2	0,5	0,630		0,3	0,2	1,5	0,146		0,3	0,2	1,3	0,192		0,0	0,2	0,2	0,855		-0,1	0,3	-0,3	0,745	
State	-0.4	0.6	-0.7	0.512		-0.4	0.8	-0.5	0.610		0.4	0.9	0.5	0.645		0.7	0.9	0.8	0.452		1.3	0.6	2.1	0.022	*
Financial Markets	0.6	0.4	1.4	0.017	*	1.5	0.5	3.0	0.003	**	2.2	0.6	3.9	0.000	***	3.0	0.6	5.2	0.000	***	4.1	0.7	5.5	0.000	***
Corporate Governance	3.5	1.9	1.9	0.062	.	2.4	1.7	1.4	0.149		2.2	1.1	2.0	0.019	*	2.3	0.9	2.5	0.048	*	1.7	0.8	2.2	0.050	*
Social Capital	1.6	1.2	1.4	0.168		2.4	1.4	1.7	0.092	.	5.1	1.8	2.8	0.005	**	4.4	1.6	2.7	0.007	**	1.2	1.6	0.7	0.459	
Human Capital	-0.2	0.5	-0.4	0.716		-0.4	0.6	-0.7	0.458		-0.7	0.7	-0.9	0.350		-0.8	0.9	-0.9	0.359		-2.4	1.1	-2.1	0.033	*
Engagement – Level 3																									
(Intercept)	-5,6	2,7	-2,0	0,044	*	-3,7	2,8	-1,3	0,182		-1,9	2,6	-0,7	0,473		-2,2	2,9	-0,8	0,439		2,3	3,5	0,7	0,506	
TRBC Chemicals	0,8	0,8	1,0	0,330		0,6	0,9	0,6	0,526		0,3	1,1	0,3	0,748		0,4	1,2	0,3	0,738		1,8	1,0	1,8	0,071	.
TRBC Energy-Fossil Fuels	-0,4	0,8	-0,5	0,649		-0,5	0,9	-0,5	0,613		-0,2	1,1	-0,2	0,879		-1,0	1,2	-0,9	0,396		2,3	1,2	1,9	0,057	.
TRBC Mineral Resources	-0,8	0,8	-1,0	0,304		-0,9	0,9	-1,0	0,316		-0,2	1,1	-0,1	0,885		1,2	1,2	0,9	0,345		3,0	1,1	2,8	0,006	**
log(Total.Assets.2019)	0,2	0,1	2,0	0,050	.	0,1	0,1	1,4	0,177		0,2	0,1	1,5	0,136		0,4	0,1	2,4	0,017	*	0,1	0,2	0,5	0,597	
State	0,5	0,5	0,9	0,354		0,2	0,5	0,4	0,720		0,2	0,6	0,3	0,778		0,1	0,6	0,2	0,873		0,6	0,7	0,8	0,413	
Financial Markets	0.0	0.2	0.1	0.950		0.2	0.3	0.6	0.578		0.8	0.3	2.5	0.010	*	1.4	0.4	3.4	0.001	***	1.5	0.5	3.4	0.001	***
Corporate Governance	2.0	1.1	1.8	0.068	.	3.0	1.0	3.0	0.003	**	2.3	0.8	2.8	0.005	**	2.6	0.9	2.9	0.004	**	4.4	0.9	4.8	0.000	***
Social Capital	2.1	0.9	2.4	0.017	*	2.6	0.9	2.7	0.007	**	2.5	1.0	2.4	0.018	*	1.7	1.2	1.4	0.159		2.0	1.3	1.6	0.119	
Human Capital	0.2	0.3	0.5	0.598		0.1	0.4	0.4	0.707		0.4	0.5	0.9	0.366		0.4	0.6	0.7	0.513		0.4	0.8	0.5	0.633	

Source: Research data (2023)

As argued, the Stakeholder Engagement Level 1 is related to providing information to stakeholders by developing one-way dialogues. That is, it is the level of engagement with practices aimed at identifying and informing stakeholders. Considering the significance of the probability values as observed in Table 19, it is empirically noticed that engagement level 1 is influenced by four of the five dimensions in one or more of the intensities estimated in the quantiles established in the regression technique of the general model. The role of Human Capital was the only dimension without significant evidence of influence on level 1 actions.

Observing the effects of each dimension in the complementary model, we see the effects of the role of the State, which shows evidence of positive influence in two intensities at level 1. From this perspective, we note that the dimension of the State once again assumes the probability of positive influence it had in the individual analysis, which may indicate an indirect effect, for example, of the Social Capital, as discussed in the previous topic. Such reflection should be deepened and tested in future studies. Therefore, considering this dimension and its behavior in this last model, we realize that there is strong and sufficient evidence of a positive influence on the two highest intensities of level 1 [75% ($\beta = 1.5$; p-value < 0.01); 90% ($\beta = 2.1$; p-value < 0.05)].

Analyzing the effects of the role of Financial Markets, we note that it presents evidence of positive influence in four intensities. That is, based on empirical observation, the institutional configuration of financial markets in emerging and middle-income countries increases engagement between companies that operate from low to the highest intensities of the first level of stakeholder engagement actions [25% ($\beta = 1.1$; p-value < 0.05); 50% ($\beta = 1.9$; p-value < 0.001); 75% ($\beta = 2.6$; p-value < 0.001); 90% ($\beta = 3.2$; p-value < 0.001)]. It is worth emphasizing, therefore, the high strength of the empirical evidence found, especially in the intermediate intensity (50%) and the highest ones (75% and 90%), which certify the influence of financial markets on this level of companies' stakeholder engagement actions.

As for the role of Social Capital, we observed its influence on engagement level 1 in three intensities, expanding its evidence when compared with the analysis of the individual effects of the dimension. Thus, at the first quantile, we see sufficient evidence of a positive influence (10%, $\beta = 3.2$; p-value < 0.05). In the second quantile, we see strong evidence of positive influence (25%, $\beta = 4.5$; p-value < 0.01). The same effect is observed in the third quantile, showing strong evidence of a positive influence on engagement level 1 (50%, $\beta = 4.9$;

p-value < 0.01). Finally, it should also be noted that we noticed weak evidence of a positive influence of Social Capital in the fourth quantile (75%, β = 3.0; p-value < 0.1).

The role of Corporate Governance follows the propensity of positive influence on engagement level 1, as found in previous models. Thus, in the complementary model, the dimension shows strong evidence of positive effects from the intermediate intensity (50%, β = 2.8; p-value < 0.01) to the highest ones [75% (β = 3.1; p-value < 0.01) and 90% (β = 2.8; p-value < 0.01)] at stakeholder engagement level 1. That is, this finding corroborates the argument that the institutional dimension of Corporate Governance is relevant for engagement actions at the informing level.

Engagement level 2 relates to responding to stakeholders in a two-way perspective, although asymmetrical with a focus on the company. This is the level of engagement with practices for consulting interests and supporting the demands of stakeholders. Considering the significance of the probability values as observed in Table 19, it is empirically perceived, through evidence, that all five dimensions influence engagement level 2 in one or more of the estimated intensities in the established quantiles.

Thus, regarding the role of the State and its observed influence on stakeholder engagement level 2, we noticed that there is sufficient evidence of a positive effect only at the highest intensity (90%, β = 1.3; p-value < 0.05). As in the previous level, this positive effect differs from that observed in the grouped model with only three dimensions, also indicating possible indirect effects of other dimensions on the role of the State that will need to be understood in future research.

Considering the effects of the role of the Financial Markets dimension, we see that it has sufficient, strong, and very strong influences on all intensities of the second level of stakeholder engagement actions, as well as in the individual analysis and the previous grouping. That is, based on empirical observation, the institutional configuration of the financial markets of the countries represented by the sample increases the engagement between companies that operate from the lowest to the highest intensities of engagement actions at level 2 [10% (β = 0.6; p-value < 0.05); 25% (β = 1.5; p-value < 0.01); 50% (β = 2.2; p-value < 0.001); 75% (β = 3.0; p-value < 0.001); 90% (β = 4.1; p-value < 0.001)]. It is worth emphasizing, once again, the high strength of the empirical evidence found, especially in the intermediate (50%) and highest intensities (75% and 90%), which again attests to financial markets' influence on the second level of engagement actions.

Still analyzing engagement level 2, we observe evidence of the influence of the Social Capital dimension in two intensities. At intermediate intensity, we noticed strong evidence of positive influence (50%, $\beta = 5.1$; p-value < 0.01). At later intensity, we see that there is also strong evidence of positive influence (75%, $\beta = 4.4$; p-value < 0.01). It should also be noted that we noticed weak evidence of a positive effect of Social Capital in the second quantile (25%, $\beta = 2.4$; p-value < 0.1).

Regarding the role of Corporate Governance, we noticed that, for stakeholder engagement level 2, the dimension maintains its potential for influence similarly to the previous level. Therefore, in this complementary model, the dimension shows sufficient evidence of a positive influence on intermediate intensity (50%, $\beta = 2.2$; p-value < 0.05) while also showing evidence of a positive influence on later intensity (75%, $\beta = 2.3$; p-value < 0.05) and, again, sufficient evidence of positive influence at the highest intensity (90%, $\beta = 1.7$; p-value < 0.05) of engagement actions level 2.

Closing the analysis of stakeholder engagement level 2, we found that, contrary to the hypotheses' statements, the role of Human Capital offered sufficient evidence of an adverse effect on the complementary model. Furthermore, this effect was observed at the highest intensity of engagement level 2 (90%, = -2.4; p-value 0.05). In such circumstances, and considering the outcomes of the individual models, the findings of Human Capital are challenging to conceptualize at this stage. As a result, it is also necessary to support additional research to better understand this institutional dimension's effects on stakeholder engagement.

Finally, stakeholder engagement level 3 relates to the possibility of deeper involvement between the company and stakeholders in a two-way and symmetrical perspective. This is the level of engagement with practices that aim to establish partnerships and collaboration between the company and stakeholders. Considering the significance of the probability values observed in Table 19, evidence empirically shows that engagement level 3 is influenced by three of the five dimensions in two or more of the estimated intensities in the established quantiles.

At level 3, we see that the role of the Financial Markets dimension maintains its perceived tendency at previous levels, showing very strong evidence of influences. Therefore, the institutional configuration of the financial markets of the countries represented by the sample increases engagement among companies with high intensities of engagement actions level 3 [75% ($\beta = 1.4$; p-value < 0.001); 90% ($\beta = 1.5$; p-value < 0.001)]. In addition, it is worth mentioning the sufficient evidence of a positive influence on the intermediate intensity of engagement actions level 3 (50%, β = 0.8; p-value < 0.05). In this perspective, this dimension maintains clear evidence of influence in all engagement levels in most of their intensities.

Regarding the role of Social Capital, we found evidence of the dimension's influence in three levels of stakeholder engagement. Thus, even at the lowest intensity, we found enough evidence of a positive effect (10%, = 2.1; p-value 0.05). At the next intensity, we notice significant evidence of a positive influence (25%, = 2.6; p-value < 0.01), while at the intermediate intensity, we see sufficient evidence of a positive influence (50%, = 2.5; p-value 0.05), bringing the observations on the dimension of Social Capital to an end. When we evaluate the model with the effects of all dimensions, we find positive evidence of the Social Capital at all levels of engagement, which contrasts with the findings in its individual analysis model. Such dimension behavior highlights the need for more theoretical and empirical depth to better understand its relevance for stakeholder engagement actions.

The third dimension with evidence of influence on stakeholder engagement level 3 is the role of Corporate Governance. Thus, this dimension presents strong evidence of influences on the intensities represented by the second, third, and fourth quantiles [25% (β = 3.0; p-value < 0.01); 50% (β = 2.3; p-value < 0.01); 75% (β = 2.6; p-value < 0.01)], in addition to presenting very strong evidence of a positive influence at the highest intensity, the fifth quantile (90%, β = 4.4; p-value < 0.001). Furthermore, it is worth mentioning the weak evidence of positive influence at the lowest intensity of stakeholder engagement level 3 (10%, β = 2.0; p-value < 0.1), showing a tendency towards a positive effect at all intensities. From these findings, it can be argued that the Corporate Governance dimension has a noticeable impact on stakeholder engagement for companies that take actions related to the three levels established in the literature. Moreover, its presence in most intensities of the three levels of engagement is similar to that observed in the role of the Financial Markets, also attesting to the dimension of Corporate Governance as one of the most relevant for stakeholder engagement in emerging and middle-income countries.

Once more, it is worth considering the significant coefficients of variation, this time for the complementary model, which takes into account all dimensions. Again, the dimension of Corporate Governance remains a standout feature, with higher values appearing more frequently across the engagement levels. This reinforces the notion that this particular dimension holds more sway over stakeholder engagement efforts.

Based on the descriptions and reflections offered on the empirical findings of this study concerning the influences of the institutional dimensions in stakeholder engagement, it is possible to discuss the relationships between such results and the hypotheses suggested. The next topic will discuss such relationships, considering the potential supports or rejections of the proposed hypotheses focusing on the individual and grouped analyses.

5.2 Hypothesis tests

Hypothesis H1 argues that the role of the State is positively associated with the stakeholder engagement levels of companies. Upon examining Table 13, we find that this claim is supported by the highest levels of engagement observed across all three dimensions. After conducting a thorough analysis of each dimension individually and in conjunction with others, it can be concluded that the State's role significantly impacts a company's behavior toward stakeholder engagement. However, it is necessary to mention the change in the direction found in the influences of the State when analyzed in group with the dimensions of Financial Markets and Corporate Governance. Such change allows the interpretation that the role of the State may be influenced by the dimensions removed in the grouped model. Furthermore, it has been noted that there is a strong correlation between the State and Social Capital, suggesting an indirect influence between the two. In this way, we understand that hypothesis H1 finds support in how it was conceived based on the literature, considering the individual analysis of its effect, but does not find support in more complete analysis perspectives, which leads us to a non-acceptance of the hypothesis in the way it was proposed. However, it should be better understood regarding other institutional dimensions acting together. Finally, we can argue that factors such as State Direct Dominance and State Indirect Intervention are relevant issues to be considered by companies operating in Emerging and Middle-Income Markets when establishing their stakeholder engagement practices.

About hypothesis H2, it is stated that the role of Financial Markets is positively associated with stakeholder engagement levels. Based on information from quantile regressions, this reflection finds strong evidence for actions at the first level of stakeholder engagement and the second and third levels in most of their intensities. Therefore, this dimension plays a significant role in all the models that have been tested. Furthermore, in the analyses after testing the dimensions individually, it is possible to see that the role of Financial Markets maintains very significant evidence of positive influence on the three levels of engagement. Factors such as Equity and Credit Markets, Family Wealth, and State-provided

Capital are issues to be considered by companies operating in Emerging and Middle-Income Markets when establishing their stakeholder engagement practices. From this perspective, it is possible to argue that the empirical findings of this research support hypothesis H2 individually and in more complex models.

As for hypothesis H3, it was stated that the role of Human Capital is positively associated with stakeholder engagement levels. However, considering the apparent lack of a pattern of influence from the tests considering the dimension relating individually to stakeholder engagement, we understand that the observed data do not support this hypothesis. In other words, although there is significant evidence of positive impact at engagement levels 1, 2, and 3, the absence of a clear influence pattern in individual analysis and the sign change of influence found at level 2 of the complementary model do not support the hypothesis. Therefore, hypothesis H3 cannot be accepted as proposed. Future studies should more deeply examine variables within the Human Capital dimension, such as Coordination with Labor and Knowledge Capital, to better comprehend their role in companies' stakeholder engagement practices.

Regarding hypothesis H4, we argue that the role of Social Capital is positively associated with stakeholder engagement levels. In this sense, considering individual influences, the analyzed data showed little evidence of the dimension's effect on the three levels of engagement. Such evidence, only at the lowest intensities of levels 1 and 3, deviates from the pattern observed in other dimensions with more robust evidence. Thus, despite a significant increase in significance at all levels in the complementary model, we cannot support hypothesis H4 as it was proposed. Further research may go deeper into the Social Capital dimension and its influencing variable, the Generalized Trust, which, as mentioned in the case of the role of the State, may have some behavior of indirect influence not analyzed in this doctoral dissertation.

Finally, hypothesis H5 discusses the positive association of Corporate Governance's role with stakeholder engagement levels. Considering the analyses, this argument finds strong evidence mainly in intermediate intensities and the highest of the three levels of engagement. It is a dimension that strongly influences all tested models. In the analyses, after testing the dimensions individually or in more complex ways, it is possible to perceive that the role of Corporate Governance maintains significant evidence of positive influence in the three levels of engagement. In other words, factors such as Ownership Concentration, Family Ownership, and Family Intervention in Management are issues to be considered by companies operating in Emerging and Middle-Income Markets when establishing stakeholder engagement practices. Therefore, this study's empirical findings support hypothesis H5, both individually and together with all other investigated dimensions.

6 DISCUSSION

In order to comprehend the outcomes and implications of this dissertation, it is crucial to revisit the research question, objectives, and hypotheses presented throughout the arguments. The main focus of this dissertation is on stakeholder engagement, with an assessment of its application using a model that classifies companies' engagement actions and evaluates potential positive associations with national institutional features. The research problem addressed in this study highlights a gap in the literature, which lacks an explanation for the levels of engagement and their relations with various institutional influences. Previous studies have emphasized the need to expand the understanding of stakeholder engagement in this manner. Therefore, our study provides theoretical and empirical contributions, as it is relevant to comprehend organizational strategies for engaging stakeholders in different scenarios.

In general terms, this study seeks to theoretically contribute to stakeholder theory by providing a better understanding of the relationship between stakeholder engagement practices and the institutional environment. It also aims to generate empirical contributions by clarifying how engagement practices are structured under different national influences. This knowledge can help enhance the stakeholder engagement actions of companies by taking into consideration the institutional contexts in which they operate.

6.1 Discussion of Objectives, Hypotheses, and Implications

The central argument of this doctoral dissertation is that institutional dimensions play a role in the stakeholder engagement of companies operating in national configurations. Thus, we understand that institutional environments are relevant issues for companies implementing stakeholder engagement actions. In this regard, we argue that the primary objective of this study was accomplished since we analyzed companies' stakeholder engagement practices considering their relations with the role of national institutions.

To accomplish our primary goal, we set out three specific objectives. The first one involved investigating the scientific production of stakeholder engagement and varieties of institutional systems. This objective was achievable by organizing our theoretical framework to encompass the extensive discourse on stakeholder theory and comparative capitalism, as well as the more specific aspects linked to stakeholder engagement and the VIS framework. Regarding the second objective of assessing stakeholder engagement levels in non-financial reports, we have accomplished it by conducting content analysis, which has served as input for multivariate analyses. Finally, the last specific goal of examining the levels of stakeholder engagement relating to the influences of institutional dimensions was achieved with the operationalization of the quantile regression procedures.

The following paragraphs present the reflections generated from the empirical findings after the operationalization of the research methods. It also considers studies related to the literature on stakeholder engagement and institutional systems.

The business literature has extensively discussed the influences of the State's role on companies (Wright et al., 2021). Several authors argue that state intervention can significantly affect business practices (Carney et al., 2019; Alami & Dixon, 2020; Wright et al., 2021). From classical to more contemporary perspectives, it is possible to observe efforts to understand the State's influence on the strategies and results of companies that operate in their territories. The general understanding is that the role of the State can generate both positive and negative influences for companies, depending on how public policies are implemented (Freeman, 1984; Porter, 1990, Clarkson, 1995; Kostova & Zaheer, 1999, Hillman, Keim e Schuler, 2004; Kang & Moon, 2012).

Thus, in terms of the first dimension, this research sought to observe the behavior of the State's effects while considering the companies' stakeholder engagement actions. The empirical results allowed reflections to promote further exploration of the issue. Even with the non-support of hypothesis H1 as it was first conceived, we could identify the effects of the State dimension in all of the models assessed in the quantitative stage of the study. As argued, the State's role assumed evidence of a positive effect on the three levels of engagement at their highest intensities, which may indicate that when only the first dimension of the VIS framework is considered, the State tends to influence companies that already operate with high intensities of stakeholder engagement practices at the three levels analyzed. However, after testing a more comprehensive model of the institutional environment incorporating the effects of the roles of Financial Markets and Corporate Governance, we noticed a shift in the influence of the State. This was not the expected effect in developing the hypotheses, provoking non-support of the hypothetical argument. Still, it generated an interesting subsequent reflection since, when running models with more dimensions, it is observed that the direction of the State's influence returns to a positive direction.

Consequently, as stated in the findings, it is feasible to infer that other dimensions impact the State's role and its influence on stakeholder engagement practices. A highlight that can be discussed is the role of Social Capital, whose absence in models tested together with other dimensions led the State to assume a negative influence. Social Capital refers to the set of social resources available in a society, including relationship networks, interpersonal trust, social norms, and shared values. In the VIS framework, Social Capital is formed by the influence factor of generalized trust. The State had positive effects in the intensities where it had statistical evidence of influence in all tests where Social Capital was jointly analyzed. Such findings may suggest that it is essential to consider elements from other institutional dimensions when attempting to understand the State's role in influencing corporate stakeholder engagement practices. In other words, it is possible to argue that generalized trust is an important factor to be considered in the relationship between the State and companies in the context of stakeholder engagement practices.

In this regard, we acknowledge signs that the non-consideration of Social Capital in analytical models may lead to misunderstandings of the relationship between the State and companies' stakeholder engagement practices. We suggest that this effect should be examined further in subsequent studies, given that this investigation provided evidence of the influence of both dimensions, despite being unable to fully support the hypotheses associated with the abovementioned dimensions.

We emphasize that the role of the State is an important dimension that companies must consider in their stakeholder engagement strategies. The current study provides evidence of its relevance. Nonetheless, it attests that, given the complexities of state action concerning companies operating on its territory, a more in-depth examination of its effects is required. Such an observation can take several forms, including aggregation of dimensions by creating new institutional constructs or an update to the VIS framework, including more influence factors other than those associated with the State dimension, such as State Direct Dominance and State Indirect Intervention.

Finally, based on our findings, it is feasible to establish connections with recent studies. For instance, Ortas et al. (2019) found that strong social and environmental State regulations influence firms' ESG performance. Furthermore, other communications with the literature are also established, taking into consideration the dichotomy of effects found regarding the role of the State (Musacchio et al., 2015; Mariotti & Marzano, 2020; Wright et al., 2021) considering different factors, such as influences of political ideologies (Aguilera et al., 2021) and state control strength (Grosman et al., 2015).

From an overall perspective, financial markets have been identified here as a critical institutional dimension that positively influences stakeholder engagement practices of companies in emerging and middle-income markets. This influence can be attributed to various issues, such as the availability of capital and resources that financial markets provide to companies, enabling them to expand their operations and engage with a broader range of stakeholders.

Through our empirical research, it has been confirmed that the institutional dimension of financial markets is essential for the development of companies' stakeholder engagement practices, corroborating with previous endeavors considering other dependent variables (Berrone et al., 2013; Ortas et al., 2019). Based on the findings, it is possible to infer that financial markets, including credit and equity markets, are crucial for a country's economic growth as they provide capital to businesses. Moreover, the availability of capital in financial markets may allow companies to invest in innovation, research, and development, for instance, as well as in stakeholder engagement activities (Christmann, 2004; Berrone et al., 2013), which can enhance their reputation and overall performance. In other words, it is feasible to argue that developed equity and credit markets benefit firms positively, probably due to increased transparency and accountability among stakeholders.

We can also argue that family wealth and State-provided capital are important sources of funding that can impact the role of financial markets. Families with significant wealth can invest in businesses and provide them with the necessary resources to grow and engage with stakeholders (Steier, 2009). Additionally, State-provided capital, such as subsidies and grants, can incentivize firms to invest in stakeholder engagement activities and create a more favorable environment for stakeholders (Lazzarini et al., 2015; Fainshmidt et al., 2018). This final argument raised suggests further avenues for reflection. For example, one could argue that the capital provided by the State constitutes a form of State influence in a different dimension, potentially impacting the relationship between Financial Markets and the actions taken by companies. This underscores the need to delve deeper into the role of the State, exploring other possible influencing factors and considering new dimensions that may arise from the intersection of established dimensions within the VIS framework.

Given the consistent and robust evidence of financial market influences on stakeholder engagement levels in most of its intensities, it is worth considering other potential implications of this aspect. An example could be the current propensity in financial markets worldwide that are increasingly focused on environmental, social, and governance (ESG) issues (Iazzolino et al., 2023). This has increased pressure on companies to invest in and adopt sustainable business practices and engage with stakeholders (Garcia et al., 2017). Companies that ignore these issues risk losing investor support and access to capital. For another example, when it comes to regulatory environments, emerging and middle-income markets can pose a challenge due to weak enforcement of laws and regulations. This can result in companies facing legal and reputational risks, making it challenging to engage with stakeholders.

Nevertheless, financial markets can promote sustainable business practices and stakeholder engagement through initiatives like the Principles for Responsible Investment (Gond & Piani, 2013; Iazzolino et al., 2023), a United Nations-supported initiative to encourage sustainable investment practices. Furthermore, organizations that engage with stakeholders and employ sustainable business practices benefit from enhanced reputation and brand value. In this sense, financial markets can play a role by rewarding companies with high ESG scores and good standings with higher stock prices.

In sum, we can argue that the role of financial markets significantly influences the stakeholder engagement practices of companies in emerging and middle-income markets. As businesses strive to create long-term value for stakeholders, they must recognize the importance of financial markets and their role in supporting their efforts. Moreover, financial market pressures and incentives can encourage firms to engage with stakeholders, which can lead to enhanced performance and reputation.

Concerning the following two dimensions, it is possible to briefly discuss the relationship between the dimensions of Social Capital and Human Capital with stakeholder engagement practices in companies in emerging and middle-income countries. The study results revealed no clear pattern of significant evidence indicating the influence of these dimensions on engagement levels, but some conjectures are possible.

Although it makes sense to associate the ability to engage with stakeholders with factors such as coordination with labor and knowledge capital – factors related to Human Capital, it was not possible to support its related hypothesis due to inconsistencies in the influence patterns of the dimension. However, as previously mentioned, Human Capital has some implicit effect on the other dimensions, as observed in the complementary analysis. This reflection reveals the need for further studies to deepen the understanding of Human Capital as an institutional influence on the companies' stakeholder engagement actions. In other words, the Human

Capital dimension may have an impact on stakeholder engagement practices, but there is a need for more empirical evidence to support this claim, which finds adherence in previous studies (Ioannou & Serafeim, 2012; Ortas et al., 2019; LaFayette et al., 2019). In future studies, it would be beneficial to investigate the specific factors within the Human Capital dimension that have the most significant impact on driving stakeholder engagement of companies. For example, examining the effects of employee training programs and employee involvement in decision-making processes could be insightful. Therefore, while the potential influence of the Human Capital dimension on stakeholder engagement practices is promising, further research is required to confirm these findings.

Social Capital operates on a comparable premise to Human Capital, as discussed regarding the State's role dimension. It's interesting to note that while some evidence suggests that Generalized Trust may positively impact stakeholder engagement, further investigation and analysis are needed. The extent of this relationship requires more research, including exploring the mechanisms through which Generalized Trust affects stakeholder engagement, as well as potential moderators and mediators. For example, it's possible that a high level of social capital in a given society could lead to increased trust in government institutions and support for policies that promote stakeholder engagement, considering the possible interaction of Social Capital with the State (Nannestad, 2008; Herreros, 2023). Furthermore, social capital may also interact with other dimensions, such as financial markets, since trust and networks can facilitate access to capital and investment opportunities. Therefore, future research should continue to explore the potential role of social capital in stakeholder engagement practices and its interaction with other dimensions, including the role of the state and financial markets.

The fifth and last dimension explored, the role of Corporate Governance, emerged as one of the variables with the most substantial evidence of a beneficial effect on stakeholder engagement practices when all levels of engagement and its different intensities were considered. The empirical findings showed that the impact of this dimension on stakeholder engagement was similar to that of financial markets. Notwithstanding, the Corporate Governance dimension stood out in all models, generally exhibiting the highest coefficients of variation at different intensities of each level of engagement. As a result, in emerging and middle-income economies, corporate governance may be regarded as an essential institutional dimension for stakeholder engagement.

Therefore, according to the literature, corporate governance plays a crucial role in overcoming institutional voids and weaknesses in markets with complex legal and regulatory environments and evolving corporate landscapes (Khanna & Palepu, 2010; Fainshmidt, 2018; Luiz et al., 2021; Abreu et al., 2023). Our research findings support this understanding, emphasizing the significance of implementing effective corporate governance in developing economies to enhance companies' stakeholder engagement strategies.

From a broad perspective, we may assert that ownership concentration, family ownership, and family intervention in management (Witt & Redding, 2013), as the influence factors considered for corporate governance in this dissertation, are essential factors shaping companies' corporate governance, particularly in emerging and middle-income economies. These factors can affect the decision-making procedures of a company and the level of participation of various stakeholders in those procedures. For instance, families-owned businesses tend to have a long-term outlook and prioritize their stakeholders' interests over immediate profits (Block & Wagner, 2014; Berrone et al., 2010; Zellweger et al., 2010), thus improving company-stakeholder relationships.

In sum, corporate governance plays a crucial role in shaping a company's stakeholder engagement practices in emerging and middle-income markets where ownership concentration and family-owned businesses are expected. By implementing effective corporate governance practices, companies can promote sustainable and equitable stakeholder engagement, ensuring that all parties are held accountable. Ultimately, this leads to better management practices and benefits all stakeholders involved.

6.2 Overall Reflections

After considering the findings and their potential implications, discussing these reflections from a broader perspective is also relevant. This dissertation, through its objectives, sought to expand the understanding of the stakeholder engagement concept considering the influences exerted by different national institutional dimensions. Based on previous theoretical and empirical approaches to stakeholder theory and the varieties of capitalism literature, exploring interdisciplinary possibilities and opening up new research avenues is possible. From this perspective, we argue that stakeholder engagement is critical to corporate strategy and decision-making, particularly in emerging and middle-income countries. Effective engagement with stakeholders can enhance organizational performance and reputation by promoting enhanced relationships, mitigating risks, and identifying opportunities.

Our research findings suggest that institutional dimensions significantly influence stakeholder engagement practices in these countries. However, we found that two of the five institutional dimensions, financial markets, and corporate governance, showed clear evidence of a positive effect on companies' engagement practices. The influence of other institutional dimensions, such as the State, social capital, and human capital, remains unclear considering their specific characteristics and requires further research. Even so, we understand that our results are sufficient to argue that companies from sensitive sectors operating in emerging and middle-income countries must consider the institutional context when developing and implementing stakeholder engagement strategies. Specifically, it is vital to prioritize the dimensions of financial markets and corporate governance as these dimensions have been shown to strongly impact different levels of stakeholder engagement practices.

In conclusion, this thesis supports the notion that interacting with stakeholders is crucial to establish better relationships between companies and stakeholders. To act strategically and respond appropriately to all stakeholders, managers must acknowledge the various behavioral assumptions, normative rules, and regulations within each institutional environment (Aaltonen, 2013; Fainshmidt et al., 2018; Stocker et al., 2020). In other words, by considering the institutional context, organizations can create successful strategies for engaging stakeholders that consider the specific factors that affect stakeholder relationships in each country.

7 CONCLUDING REMARKS

Companies increasingly face complex business environments, prompting them to adopt effective strategies and best practices to engage with stakeholders and attain sustainable development. These practices not only provide a competitive edge but also promote value creation for stakeholders and society at large. This study has addressed that these issues are widespread globally, with various institutional structures potentially influencing their implementation. In this regard, our investigation primarily aimed to analyze how companies engage with their stakeholders and understand the role national institutions play in these practices. In this sense, we sought to understand how institutional characteristics affect engagement actions and their varying levels and intensities.

Analyzing companies operating in sensitive sectors in emerging and middle-income economies provides insights into stakeholder engagement in developing countries. This kind of information can be relevant in the international context and enhance our understanding of the stakeholder approach in these scenarios. We have studied companies from 32 countries with developing status as recognized by international organizations like the IMF, World Bank, and OECD. These nations have substantial representation in the global economy and trade, including participation in groups such as BRICS and G20. Additionally, even non-emerging countries analyzed, like Botswana, Nigeria, and Vietnam, have international prominence due to their projected rapid economic growth in the coming years, as reported by the IMF in 2022.

The search for expanding knowledge about stakeholder engagement in such institutional contexts was established as an effort to broaden the understanding of stakeholder theory in scenarios that are still little explored but that demand attention from the literature (Kujala et al., 2022). In this sense, the study also aligns with recent propositions of new paths for stakeholder theory while directing research choices considering arguments beyond the relationship between stakeholder management and market performance (Bridoux & Stoelhorst, 2022). Based on prior research, this dissertation acknowledges that implementing stakeholder engagement initiatives can yield favorable outcomes for companies in the long run (Stocker et al., 2020). Consequently, we focus on examining the behavior of companies' engagement actions as entities operating within institutional environments composed of five dimensions of analysis.

Our research suggests that two of the five dimensions analyzed significantly impact stakeholder engagement at all levels. Specifically, the Financial Markets and Corporate Governance dimensions were found to have the most positive effects, while the State's role also showed considerable influence. However, the State's influence is unclear due to its varying effects in different models, potentially having indirect effects on other dimensions. Regarding Social Capital and Human Capital, there was insufficient evidence to support the proposed hypotheses, as their behaviors were not consistent. Therefore, we recommend further studies to explore these dimensions more thoroughly.

In sum, when operating in emerging and middle-income countries, companies need to take the institutional context into account in order to develop effective stakeholder engagement strategies. Corporate governance and financial markets roles should be strongly considered, as they have positively impacted stakeholder engagement practices. However, there is a need for further research to understand the effects of other institutional dimensions on stakeholder engagement practices. Moreover, our research reflections can point to some challenges companies in these contexts may face when trying to engage with stakeholders effectively. These challenges are regarded to prior knowledge about developing markets, including a lack of resources and economic and political instability. Addressing these challenges is essential for developing effective stakeholder engagement practices in these countries, and we still need to know more about them.

7.1 Contributions

In light of the findings of this research, we align with the views of Colquitt and Zapata-Phelan (2007) regarding the significance of conducting studies that can yield valuable theoretical contributions. For the authors, such studies can be achieved by exploring uncharted relationships, making predictions based on existing models, and/or testing established theories. From this viewpoint, this doctoral dissertation meets these criteria by delving into unexplored associations and suggesting possible approaches to comprehending the connections between stakeholder engagement and institutional environments represented by its dimensions.

Considering the theoretical contributions, our study adds to the existing literature on stakeholder engagement in developing countries by emphasizing the role of institutional dimensions in shaping companies' practices. While previous research has focused on the importance of stakeholder engagement for overall performance, our study delves deeper by identifying specific institutional dimensions that positively impact stakeholder engagement. Our findings reveal that effective stakeholder engagement practices depend heavily on these countries' financial markets and corporate governance structures. Therefore, our study contributes to the literature on stakeholder theory by highlighting that the effectiveness of stakeholder engagement practices on overall performance may vary based on the institutional context. Consequently, companies must create stakeholder engagement strategies to ensure success in emerging and middle-income countries, considering the specific institutional factors that influence stakeholder relationships.

Our study also contributes to the field of institutional approaches, considering the comparative capitalism literature. From a broad perspective, the theory proposes that organizations must adhere to their institutional environment's norms, values, and beliefs to establish legitimacy and endure over time (Wicks & Berman, 2004). Our study demonstrates that stakeholder engagement practices can be an intrinsic component of this institutional conformity process in emerging and middle-income countries. Companies must engage with stakeholders in these contexts to gain legitimacy and maintain their social license to operate. This understanding highlights the relevance of interdisciplinarity between stakeholder and institutional theories.

From social and managerial perspectives, our research also offers insights for companies operating in emerging and middle-income countries. Our findings indicate that strong corporate governance practices positively impact stakeholder engagement. Therefore, promoting transparency and accountability can help companies build trust with stakeholders and encourage responsible business practices. Even with high ownership concentration as a way of overcoming institutional voids, it is essential to prioritize fair business practices and improve company-stakeholder relationships fostering economic and social development within a country. Furthermore, our study highlights the importance of financial markets in stakeholder engagement actions. Therefore, companies should prioritize responsibility in disclosing relevant information to investors and other stakeholders to establish a strong relationship with financial markets institutions.

In addition to these contributions, our study aligns with the broader debate on sustainability and business ethics. Organizations such as the United Nations and the World Economic Forum have advocated for research into the influence of stakeholder engagement on sustainability and value creation, and our findings may support these efforts. Our study can help promote more responsible and sustainable business practices globally by contributing to the understanding of stakeholder engagement practices in developing markets.

7.2 Challenges, Research Limitations, and Recommendations for Future Studies

Although this study's contributions and implications shed light on the relationship between stakeholder engagement practices and institutional dimensions, it is important to acknowledge the limitations when interpreting the findings. One such limitation is the scope of the content analysis technique used. While this method has made progress in evaluating information in non-financial reports, it has limitations in assessing the quality of reports per international guidelines. However, an attempt led by GRI inspired the new Universal Standards (GRI, 2021), aiming at devising more concise and unambiguous instructions for companies to create reports that uphold the values of accountability, consistency, accuracy, and transparency. The consistent evolution of international reporting standards highlights the ongoing progress of this resource. Despite its limitations, it remains a valuable source of information for comprehending organizational strategies directed toward stakeholders.

An additional limitation is that our study's multivariate method, the quantile regression, has certain constraints, especially in terms of generalizability. As with any statistical analysis, the validity of our results relies on the assumptions made about the model and the data, as well as the quality of the data used. While we took care to select a representative sample and validate our model, the results we achieved should be interpreted with caution and cannot be generalized beyond the context of emerging and middle-income countries (Koenker & Hallock, 2001).

Furthermore, the cross-sectional nature of our study limits our ability to determine the direction of causality between stakeholder engagement practices and institutional dimensions. Although we discovered evidence of beneficial associations between stakeholder engagement practices and institutional dimensions, it is possible that these relationships are bidirectional or that other factors are at work jointly or individually, as we perceived potential clues when we observe the roles of the State and Social Capital. To overcome this limitation, future research might use a longitudinal design or experimental approaches to determine causality and investigate the mechanisms underlying the observed relationships (Bollen & Jackman, 1985).

As observed, this study specifically examined institutional dimensions without considering other potential factors that could affect stakeholder engagement practices, including cultural and social norms, environmental factors, and technological advancements. Still, in this perspective, a limitation that can also be observed in this study is that it considers institutional dimensions as a set of influencing factors. Therefore, it would be beneficial to explore the specific impacts of these factors to gain a more comprehensive understanding of the institutional role in stakeholder engagement. In other words, further research should investigate how all these institutional factors interact to influence stakeholder engagement practices.

In terms of other methods, qualitative research, such as interviews or case studies, could be useful to gain a deeper understanding of the complex interplay between stakeholder engagement and institutional features (Eisenhardt, 1989). For instance, conducting case studies on specific companies or industries under different institutional environments can provide a more in-depth understanding of the factors affecting stakeholder engagement actions. These studies can be used to explore the mechanisms by which stakeholder engagement practices are developed in specific scenarios. In addition, a possible way to expand on the ideas presented here is to examine how engagement actions vary among different stakeholder groups. By analyzing the impact of institutional factors on engagement strategies for specific stakeholders, one can determine which groups receive the most attention in varying institutional settings. Such information can also be obtained through content analysis followed by multivariate methods. This could demonstrate the importance of these stakeholders in different national contexts.

Finally, it is possible to state that this dissertation, by exploring the context of institutional dimensions, is paving the way for broader future possibilities. One of the challenges encountered was enabling comparisons between different institutional systems. Considering the VIS Framework mentioned in our theoretical background, such systems are formed by arrangements of specific characteristics of each institutional dimension. From this perspective, understanding and comparing nuances of company-stakeholder relationships across different institutional systems presented or even between regions or countries' economic profiles can yield valuable theoretical and empirical reflections in the future.

In conclusion, although this study faced some limitations and challenges, several prospects exist for further exploration. These opportunities can expand on the discoveries and enhance our comprehension of stakeholder engagement in diverse institutional settings.

REFERENCES

Aaltonen, K. (2013). The establishment of legitimacy: the case of international projects. *International Journal of Managing Projects in Business*.

Abreu, M. C. S., Soares, R. A., Daniel-Vasconcelos, V., & Crisóstomo, V. L. (2023). Does board diversity encourage an environmental policy focused on resource use, emission reduction and innovation? The case of companies in Latin America. *Corporate Social Responsibility and Environmental Management*, 30(3), 1161– 1176.

Acemoglu, D., Robinson, J. 2012. *Why Nations Fail: The Origins of Power, Prosperity and Poverty*. New York: Crown, 529.

Aguilera, R. V., & Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review*, *28*(3), 447-465.

Aguilera, R., Duran, P., Heugens, P. P. M. A. R., Sauerwald, S., Turturea, R., & Van Essen, M. (2021). State ownership, political ideology, and firm performance around the world. *Journal of World Business*, *56*(1), 101113.

Alami, I., & Dixon, A. D. (2020). State capitalism(s) redux? Theories, tensions, controversies. *Competition & Change*, *24*(1), 70–94.

Aligica, P. D. (2006). Institutional and stakeholder mapping: frameworks for policy analysis and institutional change. *Public Organization Review*, *6*(1), 79-90.

Amable, B. (2003). *The diversity of modern capitalism*. OUP Oxford.

Andriof, J., & Waddock, S. (2017). Unfolding stakeholder engagement. In *Unfolding stakeholder thinking* (pp. 19-42). Routledge.

Andriof, J., Rahman, S. S., Waddock, S., & Husted, B. (2002). Introduction: JCC theme issue: Stakeholder responsibility. *The Journal of Corporate Citizenship*, 16-19.

Bakker, F. G., Den Hond, F., King, B., & Weber, K. (2013). Social movements, civil society and corporations: Taking stock and looking ahead. *Organization studies*, *34*(5-6), 573-593.

Barnea, A., & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of business ethics*, *97*, 71-86.

Bazuchi, K. R. V., Zacharias, S. A. D. S., Broering, L. W., Arreola, M. F., & Bandeira-de-Mello, R. (2013). The role of home country political resources for Brazilian multinational companies. *BAR-Brazilian Administration Review*, *10*, 415-438.

Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel evidence. *Journal of Banking & Finance*, *28*(3), 423-442.

Belal, A. R. (2002). Stakeholder accountability or stakeholder management: a review of UK firms' social and ethical accounting, auditing and reporting (SEAAR) practices. *Corporate Social Responsibility and Environmental Management*, *9*(1), 8-25.

Bendell, B. L., & Huvaj, M. N. (2020). Does stakeholder engagement through corporate social and environmental behaviors affect innovation?. *Journal of Business Research*, *119*, 685-696.

Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less?. *Administrative science quarterly, 55*(1), 82-113.

Berrone, P., Fosfuri, A., Gelabert, L., & Gomez-Mejia, L. R. (2013). Necessity as the mother of 'green'inventions: Institutional pressures and environmental innovations. *Strategic Management Journal*, *34*(8), 891-909.

Bjørnskov, C. (2003). The Happy Few: Cross–Country Evidence on Social Capital and Life Satisfaction. *Kyklos*, *56*(1), 3-16.

Bjørnskov, C. (2012). How does social trust affect economic growth?. *Southern Economic Journal*, *78*(4), 1346-1368.

Block, J. H., & Wagner, M. (2014). The effect of family ownership on different dimensions of corporate social responsibility: Evidence from large US firms. *Business Strategy and the Environment*, *23*(7), 475-492.

Boaventura, J. M. G., Bosse, D. A., de Mascena, K. M. C., & Sarturi, G. (2020). Value distribution to stakeholders: The influence of stakeholder power and strategic importance in public firms. *Long Range Planning*, *53*(2), 101883.

Bohle, D., & Greskovits, B. (2009). Varieties of Capitalism and Capitalism «tout court». *European Journal of Sociology/Archives Européennes de Sociologie*, *50*(3), 355-386.

Bollen, K. A., & Jackman, R. W. (1985). Regression diagnostics: An expository treatment of outliers and influential cases. *Sociological Methods & Research*, *13*(4), 510-542.

Bowen, F., Newenham-Kahindi, A., & Herremans, I. (2010). When suits meet roots: The antecedents and consequences of community engagement strategy. *Journal of Business Ethics*, *95*, 297-318.

Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-economic review*, *10*(1), 3-28.

Branco, M. C., & Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. Journal of Business Ethics, 83(4), 685-701.

Bridoux, F., & Stoelhorst, J. W. (2016). Stakeholder relationships and social welfare: A behavioral theory of contributions to joint value creation. *Academy of Management Review*, *41*(2), 229-251.

Bridoux, F., & Stoelhorst, J. W. (2022). Stakeholder theory, strategy, and organization: Past, present, and future. *Strategic Organization*, *20*(4), 797-809.

Bundy, J., Vogel, R. M., & Zachary, M. A. (2018). Organization–stakeholder fit: A dynamic theory of cooperation, compromise, and conflict between an organization and its stakeholders. *Strategic Management Journal*, *39*(2), 476-501.

Business Roundtable (2019) *Statement on the purpose of the corporation*. Retrieved from https://s3.amazonaws.com/brt.org/BRT-StatementonthePurposeofaCorporationOctober2020.pdf

Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, *108*, 467-480.

Carney, M., Estrin, S., Liang, Z., & Shapiro, D. (2019). National institutional systems, foreign ownership and firm performance: The case of understudied countries. *Journal of World Business*, *54*(4), 244-257.

Carney, R. W., & Witt, M. A. (2014). The role of the state in Asian business systems. *The Oxford handbook of Asian business systems*, 538-560.

Castelló, I., Etter, M., & Årup Nielsen, F. (2016). Strategies of legitimacy through social media: The networked strategy. *Journal of management studies*, *53*(3), 402-432.

Christmann, P. (2004). Multinational companies and the natural environment: Determinants of global environmental policy. *Academy of Management Journal*, *47*(5), 747-760.

Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, *20*(1), 92-117.

Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Trends in theory building and theory testing: A five-decade study of the Academy of Management Journal. *Academy of management journal*, *50*(6), 1281-1303.

Cundy, A. B., Bardos, R. P., Church, A., Puschenreiter, M., Friesl-Hanl, W., Müller, I., Neu, S., Mench, M., Witters, N., & Vangronsveld, J. (2013). Developing principles of sustainability and stakeholder engagement for "gentle" remediation approaches: The European context. *Journal of Environmental Management*, *129*, 283-291.

Dam, L., & Scholtens, B. (2013). Ownership concentration and CSR policy of European multinational enterprises. *Journal of Business Ethics*, *118*, 117-126.

Davis, G. & Marquis, C. (2005). The Globalization of Stock Markets and Convergence in Corporate Governance. In V. Nee & R. Swedberg (Ed.), *The Economic Sociology of Capitalism* (pp. 352-390). Princeton: Princeton University Press.

Dawkins, C. (2015). Agonistic pluralism and stakeholder engagement. *Business Ethics Quarterly*, *25*(1), 1-28.

Delgado, I. G. (2010). Variedades de Capitalismo e os caminhos da Política Industrial Brasileira–elementos para uma análise comparativa. *Desenvolvimento em Debate*, *1*(1), 29-49.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.

Diniz, E. (2010). Estado, variedades de capitalismo e desenvolvimento em países emergentes. *Desenvolvimento em debate*, *1*(1), 7-27.

Dmytriyev, S. D., Freeman, R. E., & Hörisch, J. (2021). The relationship between stakeholder theory and corporate social responsibility: Differences, similarities, and implications for social issues in management. *Journal of Management Studies*, *58*(6), 1441-1470.

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review*, *20*(1), 65-91.

Ebeling, F. (2016). Variedades de capitalismo e complementaridades institucionais: uma análise da política petrolífera brasileira e da viabilidade do" Projeto Pré-Sal". *Cadernos EBAPE. BR*, *14*, 418-439.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of management review*, *14*(4), 532-550.

Esping-Andersen, G. (1996). After the golden age? Welfare state dilemmas in a global economy. *Welfare states in transition: National adaptations in global economies*, 1-31.

Evan W, Freeman RE. 1988. A stakeholder theory of the modern corporation: Kantian capitalism. In *Ethical Theory and Business*, 3rd ed. T Beauchamp, N Bowie (eds). Prentice Hall: Englewood Cliffs; 97– 106.

Evans, P. B. (1989). Predatory, developmental, and other apparatuses: A comparative political economy perspective on the third world state. In *Sociological forum* (Vol. 4, pp. 561-587). Kluwer Academic Publishers-Plenum Publishers.

Evans, P.B. (2014). The Capability Enhancing Developmental State: Concepts and National Trajectories. In: Kim, E.M., Kim, P.H. (eds) The South Korean Development Experience. Critical Studies of the Asia Pacific Series. Palgrave Macmillan, London.

Fainshmidt, S., Judge, W. Q., Aguilera, R. V., & Smith, A. (2018). Varieties of institutional systems: A contextual taxonomy of understudied countries. *Journal of World Business*, *53*(3), 307-322.

Finchelstein, D. (2017). The role of the State in the internationalization of Latin American firms. *Journal of World Business*, *52*(4), 578-590.

Fogel, K. (2006). Oligarchic family control, social economic outcomes, and the quality of government. *Journal of International Business Studies*, *37*, 603-622.

Freeman, R. E. 1984. Strategic management. In *A stakeholder approach*. Boston: Pitman.

Freeman, R. E. 2017. Five challenges to stakeholder theory: A report on research in progress. In *Stakeholder management* (pp. 1-20). Emerald Publishing Limited.

Freeman, R. E., Harrison, J. S., & Wicks, A. C. (2007). *Managing for stakeholders: Survival, reputation, and success*. Yale University Press.

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). Stakeholder theory: The state of the art.

Friedman, A. L., & Miles, S. 2006. *Stakeholders: Theory and practice*. Oxford University Press on Demand.

Frooman, J. (2010). The issue network: Reshaping the stakeholder model. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, *27*(2), 161-173.

Gallego-Álvarez, I., & Pucheta-Martínez, M. C. (2020). How cultural dimensions, legal systems, and industry affect environmental reporting? Empirical evidence from an international perspective. *Business Strategy and the Environment*, *29*(5), 2037-2057.

Garcia, A. S., Mendes-Da-Silva, W., & Orsato, R. J. (2017). Sensitive industries produce better ESG performance: Evidence from emerging markets. *Journal of cleaner production*, *150*, 135-147.

Ghodsvali, M., Krishnamurthy, S., & de Vries, B. (2019). Review of transdisciplinary approaches to food-water-energy nexus: A guide towards sustainable development. *Environmental Science & Policy*, *101*, 266-278.

Global Reporting Initiative (GRI). 2016. The GRI Standards: the global standards for sustainability reporting. Amsterdam, the Netherlands: Global Reporting Initiative.

Global Reporting Initiative (GRI). 2021. A Short Introduction to the GRI Standards. Amsterdam, the Netherlands: Global Reporting Initiative.

Glynn, M. A., & D'Aunno, T. (2023). An Intellectual History of Institutional Theory: Looking Back to Move Forward. *Academy of Management Annals*, *17*(1), 301-330.

Góes, H. A. A., Fatima, G., Santos Jhunior, R. d. O., & Boaventura, J. M. G. (2023). Managing for stakeholders towards corporate environmental sustainability. *Corporate Social Responsibility and Environmental Management*, 1– 12.

Gond, J. P., & Piani, V. (2013). Enabling institutional investors' collective action: The role of the principles for responsible investment initiative. *Business & Society*, *52*(1), 64-104.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American journal of sociology*, *91*(3), 481-510.

Greenwood, M. 2007. Stakeholder engagement: Beyond the myth of corporate responsibility. *Journal of Business Ethics*, *74*(4), 315–327.

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.

Grushina, S. V. (2017). Collaboration by design: Stakeholder engagement in GRI sustainability reporting guidelines. *Organization & Environment*, *30*(4), 366-385.

Gupta, K., Crilly, D., & Greckhamer, T. (2020). Stakeholder engagement strategies, national institutions, and firm performance: A configurational perspective. *Strategic Management Journal*, *41*(10), 1869-1900.

Hahn, R., & Lülfs, R. (2014). Legitimizing negative aspects in GRI-oriented sustainability reporting: A qualitative analysis of corporate disclosure strategies. *Journal of business ethics*, *123*, 401-420.

Hair Jr., J. F., Wolfinbarger, M., Money, A. H., Samouel, P., & Page, M. J. (2015). Essentials of Business Research Methods. In *Essentials of Business Research Methods* (4th ed.). Routledge.

Hall, P. A., & Soskice, D. 2001. An introduction to varieties of capitalism. In P. A. Hall, & D. Soskice (Eds), *Varieties of capitalism: The institutional foundations of comparative advantage*: 1–68. Oxford: Oxford University Press.

Harris, J. D., & Freeman, R. E. (2008). The impossibility of the separation thesis: A response to Joakim Sandberg. *Business Ethics Quarterly*, *18*(4), 541-548.

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Business ethics quarterly*, *23*(1), 97-124.

Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic management journal*, *31*(1), 58-74.

Harrison, J. S., Phillips, R. A., & Freeman, R. E. (2020). On the 2019 business roundtable "statement on the purpose of a corporation". *Journal of Management*, *46*(7), 1223-1237.

Henisz, W. J. (2000). The institutional environment for multinational investment. Journal of Law, Economics, and Organization, 16(2), 334-364.

Henisz, W. J., Dorobantu, S., & Nartey, L. J. (2014). Spinning gold: The financial returns to stakeholder engagement. *Strategic management journal*, *35*(12), 1727-1748.

Herreros, F. (2023). The State and Trust. *Annual Review of Political Science*, *26*.

Heugens, P. P., & Lander, M. W. (2009). Structure! Agency!(and other quarrels): A meta-analysis of institutional theories of organization. *Academy of management journal*, *52*(1), 61-85.

Hillman, A. J., Keim, G. D., & Schuler, D. (2004). Corporate political activity: A review and research agenda. *Journal of management*, *30*(6), 837-857.

Hine, J. A., & Preuss, L. (2009). "Society is out there, organisation is in here": On the perceptions of corporate social responsibility held by different managerial groups. *Journal of Business Ethics*, *88*, 381-393.

Holzer, B. (2008). Turning stakeseekers into stakeholders: A political coalition perspective on the politics of stakeholder influence. *Business & Society*, *47*(1), 50-67.

Hourneaux Junior, F., Galleli, B., Gallardo-Vázquez, D., & Sánchez-Hernández, M. I. (2017). Strategic aspects in sustainability reporting in oil & gas industry: The comparative case-study of Brazilian Petrobras and Spanish Repsol. *Ecological Indicators*, *72*, 203-214.

Iazzolino, G., Bruni, M. E., Veltri, S., Morea, D., & Baldissarro, G. (2023). The impact of ESG factors on financial efficiency: An empirical analysis for the selection of sustainable firm portfolios. Corporate Social Responsibility and Environmental Management, 1–11.

IMF. (2022). Fiscal Monitor. *International Monetary Fund*. Retrieved February 3, 2023, from https://www.imf.org/en/Publications/FM/Issues/2022/10/09/fiscal-monitor-october-22

Inglehart, R. (1999). Trust, well-being and democracy. In M. E. Warren (Ed.), Democracy & trust (pp. 88–120). New York: Cambridge University Press.

Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, *43*, 834-864.

Jackson, G. (2005). Stakeholders under pressure: corporate governance and labour management in Germany and Japan. *Corporate Governance: An International Review*, *13*(3), 419-428.

Jackson, G., & Deeg, R. (2008). Comparing capitalisms: Understanding institutional diversity and its implications for international business. *Journal of international business studies*, *39*, 540-561.

Jackson, G., & Deeg, R. (2019). Comparing capitalisms and taking institutional context seriously. *Journal of International Business Studies*, *50*, 4-19.

Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Academy of management review*, *20*(2), 404-437.

Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, *43*(3), 371-391.

Kang, N., & Moon, J. (2012). Institutional complementarity between corporate governance and corporate social responsibility: A comparative institutional analysis of three capitalisms. *Socio-Economic Review*, *10*(1), 85-108.

Khanna, T., & Palepu, K. G. (2010). *Winning in emerging markets: A road map for strategy and execution*. Harvard Business Press.

Knack, S. (2002). Social Capital and the Quality of Government: Evidence from the States. *American Journal of Political Science*, *46*(4), 772-785.

Knack, S., & Keefer, P. (1997). Does social capital have an economic payoff? A cross-country investigation. *The Quarterly journal of economics*, *112*(4), 1251-1288.

Koenker, R., & Bassett, G. (1978). Regression Quantiles. *Econometrica*, 46(1), 33.

Koenker, R., & Hallock, K. F. (2001). Quantile regression. *Journal of economic perspectives*, *15*(4), 143-156.

Kong, D. T. (2015). A gene–environment interaction model of social trust: The 5-HTTLPR S-allele prevalence as a moderator for the democracy–trust linkage. *Personality and Individual Differences*, *87*, 278-281.

Kong, D. T. (2016). A gene-dependent climatoeconomic model of generalized trust. *Journal of World Business*, *51*(2), 226-236.

Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management review*, *24*(1), 64-81.

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.

Krippendorff, K., (1980). Validity in content analysis. In: Mochmann, E. (Ed.), Computer Strategies for Communication Analysis. Campus, Frankfurt, Germany, pp. 69–112.

Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A., & Laude, D. (2022). Stakeholder engagement: Past, present, and future. *Business & Society*, *61*(5), 1136-1196.

Kumar, K., Boesso, G., Batra, R., & Yao, J. (2021). Cross-national differences in stakeholder management: Applying institutional theory and comparative capitalism framework. *Business Strategy and the Environment*, *30*(5), 2354-2366.

LaFayette, B., Curtis, W., Bedford, D., & Iyer, S. (2019). Knowledge capital–The big picture. In *Knowledge Economies and Knowledge Work* (pp. 87-104). Emerald Publishing Limited.

Lane, D. (2008). From chaotic to state-led capitalism. *New Political Economy*, *13*(2), 177-184.

Laplume, A. O., Sonpar, K., & Litz, R. A. (2008). Stakeholder theory: Reviewing a theory that moves us. *Journal of management*, *34*(6), 1152-1189.

Lawrence, T. B., Leca, B., & Zilber, T. B. (2013). Institutional work: Current research, new directions and overlooked issues. *Organization studies*, *34*(8), 1023-1033.

Lazzarini, S. G., Musacchio, A., Bandeira-de-Mello, R., & Marcon, R. (2015). What do state-owned development banks do? Evidence from BNDES, 2002–09. *World Development*, *66*, 237-253.

Lee, D. D., & Faff, R. W. (2009). Corporate sustainability performance and idiosyncratic risk: A global perspective. *Financial Review*, *44*(2), 213-237.

Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of economic literature*, *35*(2), 688-726.

López-Concepción, A., Gil-Lacruz, A. I., & Saz-Gil, I. (2022). Stakeholder engagement, Csr development and Sdgs compliance: A systematic review from 2015 to 2021. *Corporate Social Responsibility and Environmental Management*, *29*(1), 19-31.

Luiz, J. M., Magada, T., & Mukumbuzi, R. (2021). Strategic Responses to Institutional Voids (Rationalization, Aggression, and Defensiveness): Institutional Complementarity and Why the Home Country Matters. *Management International Review*, *61*(5), 681-711.

Madueño, J. H., Jorge, M. L., Conesa, I. M., & Martínez-Martínez, D. (2016). Relationship between corporate social responsibility and competitive performance in Spanish SMEs:

Empirical evidence from a stakeholders' perspective. *BRQ Business Research Quarterly*, *19*(1), 55-72.

Mallin, C. (2016). Corporate Governance, 6th edition: Oxford University Press.

Manetti, G. (2011). The quality of stakeholder engagement in sustainability reporting: empirical evidence and critical points. *Corporate social responsibility and environmental management*, *18*(2), 110-122.

Manetti, G., & Toccafondi, S. (2012). The role of stakeholders in sustainability reporting assurance. *Journal of business ethics*, *107*, 363-377.

Mariotti, S., & Marzano, R. (2019). Varieties of capitalism and the internationalization of state-owned enterprises. *Journal of International Business Studies*, *50*, 669-691.

Mariotti, S., & Marzano, R. (2020). Relational ownership, institutional context, and internationalization of state-owned enterprises: When and how are multinational co-owners a plus?. *Global Strategy Journal*, *10*(4), 779-812.

McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization science*, *14*(1), 91-103.

Mello, C. D. A. (2015). Problemas da Abordagem da Variedades de Capitalismo nas Economias da América Latina. *Revista de Direito, Economia e Desenvolvimento Sustentável*, *1*(1).

Mitchell, J. R., Mitchell, R. K., Hunt, R. A., Townsend, D. M., & Lee, J. H. (2022). Stakeholder engagement, knowledge problems and ethical challenges. *Journal of Business Ethics*, *175*, 75-94.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of management review*, *22*(4), 853-886.

Monteduro, F., Cecchetti, I., Lai, Y., & Allegrini, V. (2021). Does stakeholder engagement affect corruption risk management?. *Journal of Management and Governance*, *25*(3), 759-785.

Moratis, L., & Brandt, S. 2017. Corporate stakeholder responsiveness? Exploring the state and quality of GRI-based stakeholder engagement disclosures of European firms. *Corporate Social Responsibility and Environmental Management*, *24*(4), 312-325.

Morsing, M., & Schultz, M. (2006). Corporate social responsibility communication: stakeholder information, response and involvement strategies. *Business ethics: A European review*, *15*(4), 323-338.

Musacchio, A., & Lazzarini, S. G. (2014). *Reinventing state capitalism: Leviathan in business, Brazil and beyond*. Harvard University Press.

Musacchio, A., Lazzarini, S. G., & Aguilera, R. V. (2015). New varieties of state capitalism: Strategic and governance implications. *Academy of management perspectives*, *29*(1), 115-131.

Nannestad, P. (2008). What have we learned about generalized trust, if anything?. *Annual Review of Political Science*, *11*, 413-436.

Noland, J., & Phillips, R. (2010). Stakeholder engagement, discourse ethics and strategic management. *International Journal of Management Reviews*, *12*(1), 39-49.

Ntim, C. G., & Soobaroyen, T. (2013). Corporate governance and performance in socially responsible corporations: New empirical insights from a Neo-Institutional framework. *Corporate Governance: An International Review*, *21*(5), 468-494.

O'Riordan, L., & Fairbrass, J. (2014). Managing CSR stakeholder engagement: A new conceptual framework. *Journal of Business Ethics*, *125*, 121-145.

OECD. (2010). Perspectives on Global Development: Shifting Wealth. *Organization for Economic Co-operation and Development*. Retrieved February 3, 2023, from https://www.oecd-ilibrary.org/development/perspectives-on-global-development-2010_9789264084728-en

Ortas, E., Gallego-Álvarez, I., & Álvarez, I. (2019). National institutions, stakeholder engagement, and firms' environmental, social, and governance performance. *Corporate Social Responsibility and Environmental Management*, *26*(3), 598-611.

Peng, M. W., & Jiang, Y. (2010). Institutions behind family ownership and control in large firms. *Journal of management Studies*, *47*(2), 253-273.

Perrini, F. (2005). Building a European portrait of corporate social responsibility reporting. *European management journal*, *23*(6), 611-627.

Phillips, R. (2003). *Stakeholder theory and organizational ethics*. Berrett-Koehler Publishers.

Phillips, R. A. (1997). Stakeholder theory and a principle of fairness. *Business Ethics Quarterly*, *7*(1), 51-66.

Porter, M. E. (1990). The competitive advantage of nations. Harvard Business Review, 68(2), 73-93.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. Annual Review of Sociology, 24(1), 1-24.

Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2020). Corporate environmental disclosure practices in different national contexts: The influence of cultural dimensions. *Organization & Environment*, *33*(4), 597-623.

Pucheta-Martínez, M. C., Bel-Oms, I., & Rodrigues, L. L. (2020). Does stakeholder engagement encourage environmental reporting? The mediating role of firm performance. *Business strategy and the environment*, *29*(8), 3025-3037.

Quivy, R. & Campenhoudt, L. (1998). *Manual de Investigação em Ciências Sociais*. Lisboa: Gradiva.

R Core Team. (2013). R: *A language and environment for statistical computing*. R Foundation for Statistical Computing. https://www.r-project.org/

Ramus, T., & Vaccaro, A. (2017). Stakeholders matter: How social enterprises address mission drift. *Journal of Business Ethics*, *143*, 307-322.

Richardson, A. J., & Welker, M. (2001). Social disclosure, financial disclosure and the cost of equity capital. *Accounting, organizations and society*, *26*(7-8), 597-616.

Rodrigues, L. L., & Craig, R. (2007). Assessing international accounting harmonization using Hegelian dialectic, isomorphism and Foucault. *Critical perspectives on accounting*, *18*(6), 739-757.

Rosecrance, R. (1996). The rise of the virtual state. *Foreign affairs*, 45-61.

RStudio Team. (2020). *RStudio: Integrated Development for R*. http://www.rstudio.com/

Sandberg, J., & Tsoukas, H. (2011). Grasping the logic of practice: Theorizing through practical rationality. *Academy of management review*, *36*(2), 338-360.

Schneider, B. R. (2009). Hierarchical market economies and varieties of capitalism in Latin America. *Journal of Latin American Studies*, *41*(3), 553-575.

Schneider, B. R. (2013). *Hierarchical Capitalism in Latin America*. Cambridge University Press.

Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage publications.

Steier, L. P. (2009). Familial capitalism in global institutional contexts: Implications for corporate governance and entrepreneurship in East Asia. *Asia Pacific Journal of Management*, *26*, 513-535.

Steier, L. P., Chua, J. H., & Chrisman, J. J. (2009). Embeddedness perspectives of economic action within family firms. *Entrepreneurship Theory and Practice*, *33*(6), 1157-1167.

Stocker, F., de Arruda, M. P., de Mascena, K. M., & Boaventura, J. M. (2020). Stakeholder engagement in sustainability reporting: a classification model. *Corporate Social Responsibility and Environmental Management*, *27*(5), 2071-2080.

Sulkowski, A. J., Edwards, M., & Freeman, R. E. (2018). Shake your stakeholder: Firms leading engagement to cocreate sustainable value. *Organization & Environment*, *31*(3), 223-241

Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic management journal*, *31*(5), 463-490.

Todeschini, B. V., Cortimiglia, M. N., & de Medeiros, J. F. (2020). Collaboration practices in the fashion industry: Environmentally sustainable innovations in the value chain. *Environmental Science & Policy*, *106*, 1-11.

Unerman, J. (2000). Methodological issues-Reflections on quantification in corporate social reporting content analysis. *Accounting, Auditing & Accountability Journal*, *13*(5), 667-681.

Uslaner, E. M. (2008). The foundations of trust: macro and micro. *Cambridge journal of economics*, *32*(2), 289-294.

Valentinov, V., & Chia, R. (2022). Stakeholder theory: A process-ontological perspective. *Business Ethics, the Environment & Responsibility*, *31*(3), 762-776.

Valle, C. D., & Sarturi, G. (2022). Dynamic capabilities for stakeholder management. *Cadernos EBAPE. BR*, *20*, 527-542.

Vidal, N. G., Berman, S., & Buren, H. V. (2015). Stakeholder theory and value creation models in Brazilian firms. *Revista brasileira de gestão de negócios*, *17*, 911-931.

Vidal, N. G., Spetic, W., Croom, S., & Marshall, D. (2022). Supply chain stakeholder pressure for the adoption of sustainable supply chain practices: examining the roles of entrepreneurial and sustainability orientations. *Supply Chain Management: An International Journal*.

Viglia, G., Pera, R., & Bigné, E. (2018). The determinants of stakeholder engagement in digital platforms. *Journal of Business Research*, *89*, 404-410.

Voronov, M., & Vince, R. (2012). Integrating emotions into the analysis of institutional work. *Academy of Management review*, *37*(1), 58-81.

Voronov, M., & Weber, K. (2016). The heart of institutions: Emotional competence and institutional actorhood. *Academy of management review*, *41*(3), 456-478.

Waddock, S. A. (2002). *Leading corporate citizens: Vision, values, value added*. Boston: McGraw-Hill/Irwin.

Watson, R., Wilson, H. N., & Macdonald, E. K. (2020). Business-nonprofit engagement in sustainability-oriented innovation: What works for whom and why?. *Journal of Business Research*, *119*, 87-98.

Weishuhn, M. (2023). Inciteful: Citation network exploration. Retrieved from https://inciteful.xyz

Westhead, P., Cowling, M., & Howorth, C. (2001). The development of family companies: Management and ownership imperatives. *Family Business Review*, *14*(4), 369-385.

Whitley, R. (1999). *Divergent capitalisms: The social structuring and change of business systems*. OUP Oxford.

Whitley, R. (2003). Competition and pluralism in the public sciences: the impact of institutional frameworks on the organisation of academic science. *Research policy*, *32*(6), 1015-1029.

Whitley, R., Jeffrey, H., Czaban, L., & Lengyel, G. (1996). Trust and contractual relations in an emerging capitalist economy: The changing trading relationships of ten large Hungarian enterprises. *Organization Studies*, *17*(3), 397-420.

Wicks, A. C., & Berman, S. L. (2004). The effects of context on trust in firm-stakeholder relationships: the institutional environment, trust creation, and firm performance. *Business Ethics Quarterly*, *14*(1), 141-160.

Williams, C. A., & Aguilera, R. V. (2008). Corporate social responsibility in a comparative perspective. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. S. Siegel (Eds.), Oxford handbook of corporate social responsibility (pp. 452–472). OUP.

Witt, M. A., & Jackson, G. (2016). Varieties of capitalism and institutional comparative advantage: A test and reinterpretation. *Journal of International Business Studies*, *47*(7), 778-806.

Witt, M. A., & Redding, G. (2013). Asian business systems: Institutional comparison, clusters and implications for Varieties of Capitalism and business systems theory. *Socio-Economic Review*, *11*(2), 265-300.

Witt, M. A., Kabbach de Castro, L. R., Amaeshi, K., Mahroum, S., Bohle, D., & Saez, L. (2015). *The business systems of the world’s leading 61 economies: Institutional comparison, clusters, and implications for varieties of capitalism and business systems research.* INSEAD working paper series, INSEAD, Fontainebleau, France.

Wooldridge, A. (2012). The visible hand. The Economist. Retrieved August 6, 2022, from https://www.economist.com/special-report/2012/01/21/the-visible-hand

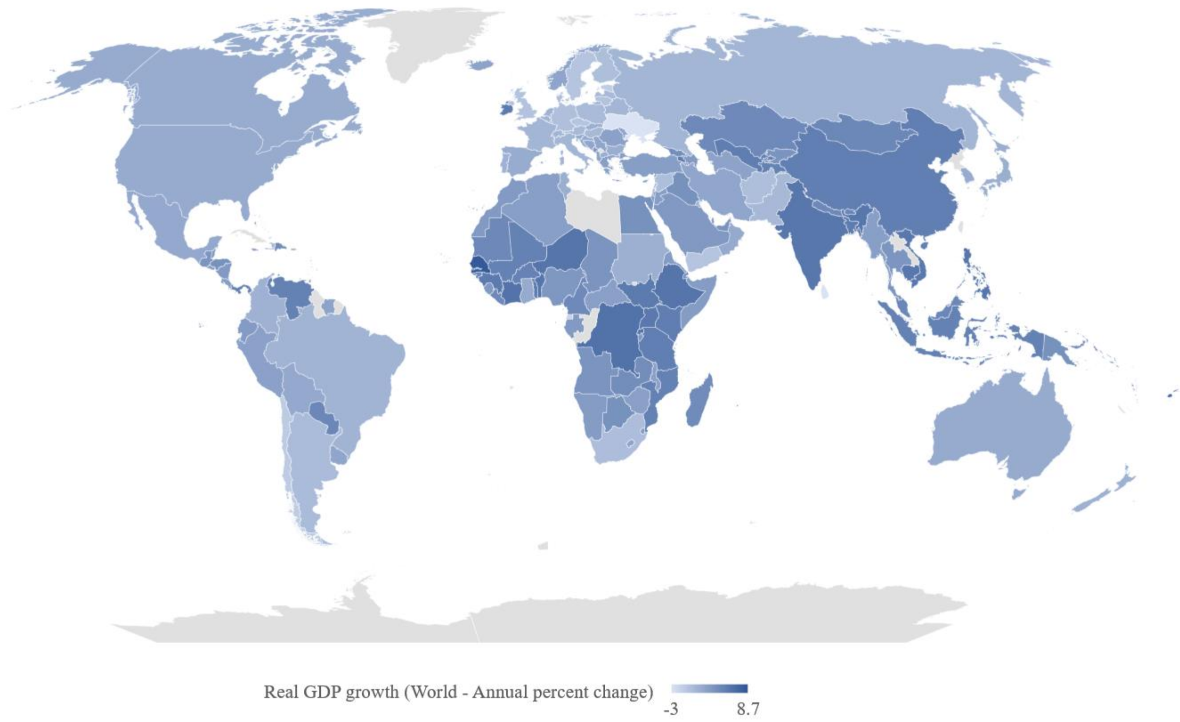
Wright, M., Wood, G., Musacchio, A., Okhmatovskiy, I., Grosman, A., & Doh, J. P. (2021). State capitalism in international context: Varieties and variations. *Journal of World Business*, *56*(2), 101160.

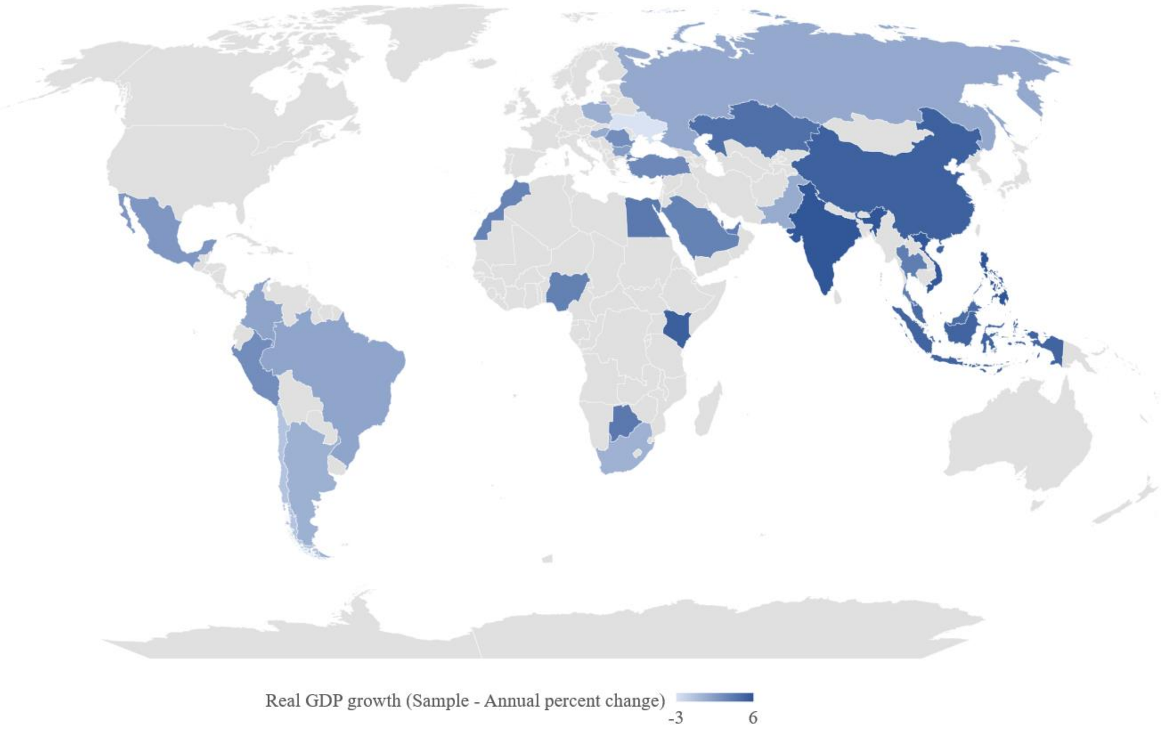
Zellweger, T. M., Eddleston, K. A., & Kellermanns, F. W. (2010). Exploring the concept of familiness: Introducing family firm identity. *Journal of family business strategy*, *1*(1), 54-63.

Zhang, X., & Whitley, R. (2013). Changing macro-structural varieties of East Asian capitalism. *Socio-economic review*, *11*(2), 301-336.

Zhao, E. Y., Fisher, G., Lounsbury, M., & Miller, D. (2017). Optimal distinctiveness: Broadening the interface between institutional theory and strategic management. *Strategic Management Journal*, *38*(1), 93-113.

Appendix A - Expected GDP growth in 2023 (World and Sample)





Source: IMF (2022)

Appendix B - Suzano (Brazil)

Our sustainability strategy

In tandem with the definition of the purpose and business strategy, throughout 2019 we worked on the process to build our sustainability strategy.

We started a benchmarking process and defined that a fundamental aspect to build our strategy would be to actively listen to the various stakeholders.

WHO DID WE LISTEN TO IN ORDER TO DEVELOP OUR SUSTAINABILITY STRATEGY?

[GRI 102-40, 102-42, 102-43, 102-44]

11 INTERVIEWS WITH SUZANO EXECUTIVE LEADERS

36 INTERVIEWS WITH STAKEHOLDERS, REPRESENTING ORGANIZATIONS AND COMPANIES WITH WHICH SUZANO RELATES IN BRAZIL, THE UNITED STATES, EUROPE AND ASIA

ONLINE SURVEY WITH APPROXIMATELY 200 PEOPLE

MEETINGS WITH APPROXIMATELY 90 ORGANIZATIONS

We then initiated a face-to-face engagement phase: it was necessary to introduce in its business strategy the new Suzano and its intent to evolve in terms of sustainability.

In this phase, the idea was to create a bond and explain about the path taken and the existing challenges, in order to capture insights, expectations and criticisms.

What did we do in this engagement phase?

- Internal roadshow - dialogue with **more than 750 employees**;
- Follow-up interviews with **30 key stakeholders**;
- External roadshow - meetings with approximately **90 organizations** in Brazil, the United States and Europe introducing Suzano and talking about the construction of the strategy, representing the diversity of stakeholders in our ecosystem, such as customers, NGOs, investors, academia and experts, amongst others.

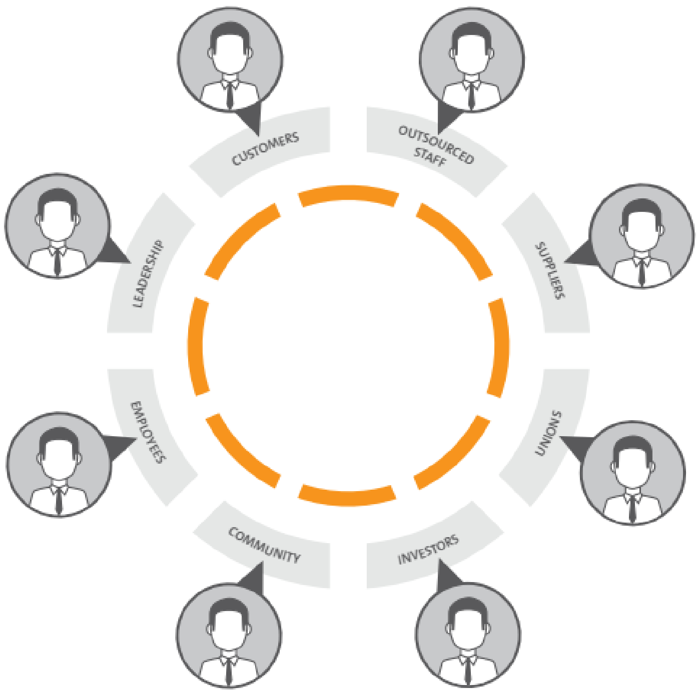
Appendix C - Usiminas (Brazil)

6 STRATEGY

MATERIALITY

In 2019, Usiminas took an important step in the maturity of its sustainability management by carrying out a new materiality exercise, which underpins the issues addressed in this report and follows the recognized GRI Standard. The materiality exercise involves the identification and prioritization of material sustainability issues for Usiminas, which are those that represent significant environmental, economic and social impacts of the Company and can have a major influence on the assessment and decision of stakeholders, both internal and external.

This process includes consulting and engagement with key stakeholders:



[102-43] [102-40]

Engagement with stakeholders followed GRI's materiality principles and selected stakeholders for consultation according to:

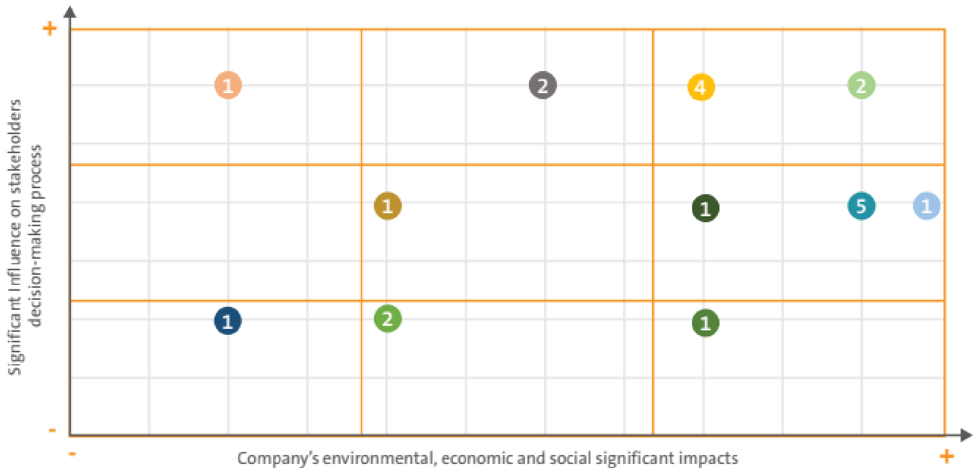
i) External reputational factors: stakeholders identified from risks and opportunities found in news and articles available on online search.

ii) Sustainability context: mapped stakeholders based on an assessment of the Company's value chain and consolidated academic articles on Usiminas areas of operation.

iii) Existing communication channels: stakeholders engaged by the Company.

iv) Stakeholders considered strategic for Usiminas business.

Stakeholder´s consultation took place through interviews, questionnaires and online channels. In addition, there is constant engagement through communication channels open to dialogue with diverse stakeholders, such as employees, neighboring communities and investors, in addition to customer satisfaction surveys. [102-42] [102-43] [102-46] [102-49]



2 Occupational Health and Safety
Innovation and portfolio positioning

4 Financial Sustainability
Ethics and Transparency
Air Quality
Preservation of Biodiversity

1 Community Relations

5 Energy efficiency and use of renewable energy
Water Resources
Supply Chain Management
Waste and hazardous materials management
Regulatory and market risks

1 Environmental Compliance

2 Quality of Life at Work
Dams' Safety

1 GHG Emissions and climate change risks

1 Infrastructure investments

2 Human Development
Sustainability Governance

1 inclusion of people with disabilities

1 Brand Positioning

Based on an exercise of prioritization of subjects, listing their relevance in relation to Usiminas significant environmental, economic and social impacts and the influence of the subjects on the stakeholders' decision-making, a total of **15 priority subjects** were identified for the Company. Aware of the importance of carrying out concrete actions for sustainability, Usiminas is attentive to the 2030 Agenda and the 17 UN SDGs - a global action plan developed in partnership by representatives of public authorities, academic institutions, civil society and the private sector, encompassing the environmental, economic and social spheres, in an integrated and indivisible manner. [102-12]

Based on this intention to contribute to advancement of the *2030 Agenda*, the Company's material subjects were associated with the SDGs, as presented below:

[102-44] [102-47]

SDGS

OCCUPATIONAL HEALTH AND SAFETY

Usiminas has People and Safety as its main values, and therefore cherishes occupational health and safety of its own employees and outsourced staff, investing in actions aimed at the daily pursuit of the Zero Accident target.

8 DECENT WORK AND ECONOMIC GROWTH

3 GOOD HEALTH AND WELL-BEING

INNOVATION AND PORTFOLIO POSITIONING

[103-1:301] [102-15]

Usiminas values excellence, always seeking to develop innovative and customized products and solutions to meet the needs of its customers.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

FINANCIAL SUSTAINABILITY

[103-1:201]

Focusing on results, achieved through challenging goals, prompt decision making and austerity in spending allows Usiminas to assume a competitive posture in both domestic and foreign markets, generating value for society and its stakeholders.

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

ETHICS AND TRANSPARENCY

SDGS

[103-1:205] [102-16] [102-17]

Transparency, ethical conduct and integrity are essential pillars in Usiminas governance, reaffirmed in management practices and the availability of an Open Channel for the submission of complaints.

AIR QUALITY

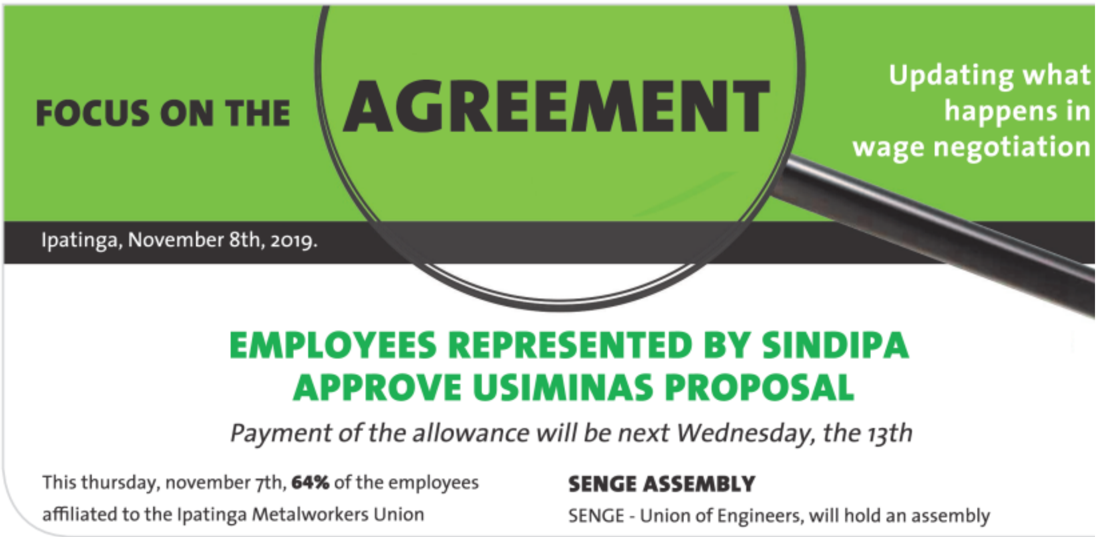
[103:305] [102-15]

Usiminas operations are carried out using modern and efficient techniques; even so, the Company recognizes its environmental impacts and continuously works to minimize them, such as particulate material emissions, which influence the quality of life and health of its employees and local communities.

PRESERVATION OF BIODIVERSITY

[103:304]

Usiminas infrastructure can have significant impacts on biodiversity in the areas surrounding its operating units. To manage such impacts, programs are carried out focusing on the preservation of riparian forests and water springs, among others.



TRADE UNION RELATIONS

Usiminas values the role of trade unions as representatives of the interests of its employees and recognizes the right of free association, formalizing this commitment in the Code of Ethics and Conduct.

The Company keeps a permanent and respectful relationship with the several Union Entities. To this end, it provides constantly open channels of communication and relies on an area dedicated to the subject, so that any conflicts and deadlocks are dealt with and resolved through negotiation, in order to mitigate and avoid negative impacts on the organizational atmosphere and the Company's reputation.

Negotiations of Collective Agreements are made directly with the unions representing the categories. In 2019, 100% of employees were covered by a Collective Labor Agreement or Convention.

The process of Labor and Union Relations foresees the monitoring of Collective Agreements by means of indicators and is regularly audited.

It is worth mentioning that the Corporate Management of Labor Relations was responsible for the implementation of a consolidated model of Labor and Union Relations Management that details the form of action, the interfaces with the entities and other areas, as well as the responsibility of each of them in the process. Employees have wide freedom of association and unions have direct access to them through assemblies, union bulletins and eventual contacts at their workplaces.

Usiminas keeps a constant relationship and seeks, together with other companies, good practices recognized in the market.

[407-1] [102-41]

Appendix D - CAP (Chile)

Stakeholder engagement

The Group seeks to always maintain transparent, truthful and timely communication with our stakeholders to align expectations and continuously improve performance. One of our key objectives in these matters is to ensure that all present and future activities are carried out generating confidence, transparency and ethics, without altering the relations with our environment, together with contributing value to the areas where we operate.

We periodically review and update the map of the relations with our stakeholders. The tools used to relate to our stakeholders include those used by the corporate and operating companies, such as magazines, newsletters, surveys, company events, the Supplier Portal, contracts with suppliers, the Tripartite Committee with the authorities and the community. Additionally, and in order to inform the stakeholders, we periodically publish documents such as management reports, financial reports and sustainability reports, among others. In addition, we regularly participate in presentations with investors and customers, and we have our website where we have a special space for them, as well as social media.

According to the Stakeholders Sustainable Index Chile (SSIndex Chile), a sustainable index of stakeholders that measures cross-risk and operational efficiency on employees, customers, suppliers, communities and investors, 75% of the workers of CAP Group agree or very much agree with the company's sustainable management on the ESG variables.

Core issues for our stakeholders

Through the ESG Compass Survey, conducted in 2019 for the fourth time, we monitored our stakeholders' perception of the Corporate Sustainability Model. In 2019, we consulted workers, customers, suppliers and community representatives from each of the operating companies, both in Chile and Peru. A total of 77% of employees participated in the survey, with an average evaluation of 75% of performance in environmental, internal social, external social and corporate governance aspects.

Our stakeholders, how we relate to them and what their main interests and concerns are

	Shareholders / Investors / Analysts	Customers	Workers / Union Leaders / Contractor Companies	Society
Who are they?	They are the main investors, minority shareholders and financial analysts. CAP is a corporation which openly trades in the stock market. 31.3% of its property corresponds to Invercap, 19.3% to Mitsubishi and remaining 49.4% to other investors *(free float)*.	We have national and international customers. In the case of CMP, the main destinations of the magnetic iron it produces are the Asian and Middle Eastern markets. CSH, for its part, allocates 91% of its production to the domestic market.	It includes operators, technicians and administrators, as well as the families of all staff. We directly employ 4,856 people. 11% of this staff corresponds to women.	This category includes organizations linked to our activity such as guilds, chambers and foundations, among others. They are also considered representatives of non-profit organizations (NGOs and foundations) and academia. This also includes the media, with which a fluid, permanent and transparent dialog is pursued.
How do we relate to them?	1. Through the area of Investor Relations. 2. Through conference calls and meetings with analysts and investors. 3. Publication of results and other relevant information on www.cap.cl. 4. Financial Report and Annual Sustainability Report.	1. On a daily basis, through the delivery of products and services. 2. Through the multi-channel platform (call center, e-mail, social media and web: www.cap.cl). 3. ESG survey, satisfaction studies, training programs (Cintac). 4. Financial Report and Annual Sustainability Report.	1. Daily work relations with direct headquarters. 2. Media and internal communication channels (Intranet, newsletters). 3. Trade unions, joint committees, channel integrity (ethics and compliance).	1. Publication of relevant information on www.cap.cl. 2. Annual Financial Report and Sustainability Report. 3. Alliances, corporate events and social media.
What are your main interests and concerns about CAP?	· Safety at work. · Transparency and clarity of information. · Financial results and project progress. · Sustainable growth of the Group and the operating companies.	· Community · Value · Claims · Environmental culture	· Compensation structure · Integrity · Suppliers · Commitment to employees · Quality of working life	· Contribution to the development of the country · Commitment to employees · Integrity · Transparent communication · Environmental responsibility

	Suppliers	Community	Authorities
Who are they?	We rely on suppliers of raw materials, goods and services. All these companies provide the key inputs for our operation. Some 69% of these suppliers come from the regions where our operating companies operate.	CMP operates in three geographical areas, where it interacts with population centers, as do Aguas CAP and PLL. CSH and Cintac, on the other hand, are located in industrial sectors adjacent to urban areas. While the operations of the limestone mine and port and on Guarello Island are developed in areas far from populated localities, but in areas of influence of communities. With all of them we seek to maintain a good neighborly relations, based on dialogue and permanent transparency.	It considers the national, regional and local authorities, the central government and the legislative chambers, which, through regulation and oversight, can impact our business.
How do we relate to them?	1. Through the area of Purchasing and Supplier Management. 2. Invoice processing system. 3. Publication of relevant information on www.cap.cl. 4. Financial Report and Annual Sustainability Report.	1. Through specific relations initiatives (community service offices, public-private partnerships, local work agreements). In particular projects, through early delivery of information. 2. Through formal communication channels (www.cap.cl. and annual 3. Sustainability Report). 4. Social media	1. Through regular channels of communication (according to the law of transparency and lobbying) 2. Reports to Regulatory agencies. 3. Public-private partnerships, working agreements with municipalities. 4. Publication of relevant information on www.cap.cl 5. Financial Report and Annual 6. Sustainability Report.
What are your main interests and concerns about CAP?	· Timely payment · Operation of the facilities · Integrity · Environmental culture	· Environmental culture · Communication · Commitment to employees · Integrity · Sustainable Development	· Compliance and respect for the legislation in force. · Integrity. · Human rights at work and in the community, including indigenous peoples. · Inclusion of stakeholders in decision making.

Appendix E - Sinopec Shanghai Petrochemical Company (China)

COMMUNICATION WITH STAKEHOLDERS

SPC attached great importance to the concerns and demand of stakeholders' interest. SPC constantly improved relevant participation mechanisms, strengthened communication and exchanges, strived to improve the transparency of the company's operations, and attended to collaborate with stakeholders to achieve win-win outcome.

Governments and supervisory agencies

- Legal operations
- Safe and reliable products
- Implementation of energy conservation and emission reduction
- Promote industry progress
- Serve national economy and the people's livelihood

Investors

- Maintain good operational performance
- Ensure stable operation situations
- Strengthen disclosure of operational information

Customers

- Adhere to the concept of creating value to customers
- Satisfy customers diversified demand
- Provide premium quality products and services

The public

- Improve the operational transparency
- Provide premium quality products

Employees

- Ensure occupational health
- Safeguard employees' rights and interests
- Improve occupational skills
- Provide platforms of development
- Achieve a balance between production and living

Industry and industry organizations

- Win-win cooperation
- Industry contributions
- Fair operations

Suppliers and partners

- Open, fair and just procurement
- Honor credibility and keep promise
- Mutual benefit and win-win

Community

- Co-construction of community
- Support public benefit
- Environmental protection
- Poverty relief

Appendix F - TATA Chemicals (India)

Engaging with our Stakeholders

Engaging effectively with stakeholders enables us to understand and respond to their interests and expectations. It is an important driver for building long-term relations which facilitates us in delivering on our strategy.

Importance of material issues in business context and how we address them

Highly Critical Material Aspects

Key stakeholders and their relevant matters	Relevant Material Issues	Various Platforms/Forums of Engagement
Shareholder and Investors Appreciation in share price and growth in dividends, business profitability and sustainability, high-level of corporate governance, environmental sustainability, financial stability and development prospects	M3 M12	Annual General Meeting (AGM), Integrated Report to shareholders, investor/analysts meets, quarterly results, media releases, company website, reports to stock exchanges
Customers Consistent quality, responsiveness to needs, aftersales service, sustainability, responsible guidelines, climate change disclosures, Sustainability Performance, Responsible Mining Code, product quality and high-value products, Health & Safety, Responsible marketing	M1 M2 M5 M6 M7	Distributor /retailer/ direct customer meets, senior leaders customer meets/visits, customer plant visits, COO club, achievers meet, KAM workshops, focus group discussion, membership in trade organisation /associations, complaints management, helpdesk, conferences, joint business development plans, information on packaging, customer surveys. CDP climate, water and supply chain reporting
Suppliers/Partners Quality issues, timely delivery, sustainability performance, safety checks, compliances, ethical behaviour, ISO and OHSAS Standards, on time payment	M2 M9 M12	Supplier prequalification/vetting, suppliers meets, supplier plant visits, partnership meetings, MoU agreements, trade association meets/seminars, professional networks, Bhagidhari Sabha, contract management/review, product workshops/on site presentations, framework agreements
Government Climate change roadmap, sustainability frameworks, policy advocacy, discussions on Plastic Waste Management Rule, framework beyond compliance and responsible care, timely contribution to exchequer, proactive engagement, contribution to local infrastructure, skill and capacity building, sustainable livelihood, clean and safe environment	M3 M5 M10 M11 M9 M12	Advocacy meetings with local/state/national government and ministries, seminars, media releases, conferences, membership in local enterprise partnership, membership in industry bodies such as ICC, BCCI, CII, etc.
Employees Responsible care, innovation, operational efficiencies, improvement areas, employee engagements, Long Term Strategy Plans, employee benefits, training, awareness, brand communication, Health & Safety	M2 M9 M12 M13 M15	Senior leaders' communication/talk, senior leadership forum, town hall briefing, goal setting and performance appraisal meetings/performance review, exit interviews, arbitration/ union meetings, wellness initiatives, focus on workplace safety, employee engagement survey, email, intranet, flat screens, websites, poster campaigns, house magazines, confluence, circulars, quarterly publication, intranet, theatre workshops (oorja), newsletters

Appendix G - Polski Koncern Naftowy ORLEN (Poland)

GRI indicators: 102-42, 102-40, 102-43

Capitals:

Responsibility and dialogue are the underlying principles of our Stakeholder relations. We seek to build them on integrity, transparency, mutual respect and professionalism.

To ensure the highest quality of Stakeholder relations, the frequency and methods of communication are tailored to the characteristics and current expectations of each Stakeholder group. A number of such activities are described below in this Statement.

GRI: 102-42

Attendees of the Stakeholder panel held in December 2017, that is representatives of the ORLEN Group and its Stakeholders, reviewed the Stakeholder Map. In late 2019, following internal consultations, the document was updated by identifying 'Society' as a separate Stakeholder group.

GRI: 102-40

ORLEN Group Stakeholder Map

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GRI: 102-43

The table below presents the frequency of Stakeholder engagement by type and group.

Employees

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
The headcount at the ORLEN Group exceeds 22 thousand. Employees are provided with fair and friendly working conditions. Relations with internal Stakeholders are based on integrity, respect in everyday relationships and on dialogue, cooperation and involvement of each staff member in building a culture consistent with the Company's core values. For more information, see 'Responsible employer'.	- Development and training - Employee benefits - 'Family-Friendly Employer' programme - Fostering a sense of community and identification with the ORLEN Group family (e.g. the ORLEN Olympics, the Employee Volunteering Programme) - Knowledge sharing and communicating ideas by employees (e.g. the IDEA portal, ORLEN Insight, 'Creator' programme) - Providing ORLEN Group employees with information on projects implemented by the Group (the Intranet, in-house bulletin, the ORLEN Group's Studio)	- Ongoing contact - Biennial satisfaction survey

Public administration

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Central and local government administration in the countries where the Group operates, that is in Poland, the Czech Republic, Lithuania, Germany and Canada.For more information, see 'Regulatory environment'.	PKN ORLEN and the other ORLEN Group companies engage in a fully transparent and open dialogue based on applicable laws, which involves reviewing drafts of legislative solutions at the national and EU legislation level.	- Ongoing contact

Capital market

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
This group comprises existing and prospective holders of financial instruments issued by an ORLEN Group company and institutions that operate and supervise the market on which such instruments are traded. It also includes entities which influence opinions and produce research reports showing PKN ORLEN as an attractive investment for potential investors and shareholders. At present, the State Treasury is PKN ORLEN's largest shareholder and its major investor. The 'capital market' group also includes: the shareholders, investors, market analysts, the Warsaw Stock Exchange, the Polish Financial Supervision Authority, rating agencies and economic journalists. For more information, see 'Communication with the capital market'.	ORLEN maintains ongoing contact with capital market institutions, which follows from the requirement to comply with legal regulations and other rules applicable to this market. In addition, the Company is actively involved in initiatives and consultations concerning the organisation of trading and legislative changes. Stakeholders are usually personally engaged through: - Conferences, meetings or teleconferences, - Webcasts, - Websites, - Capital letters, - Road shows. An essential element of engaging a very broad group of Stakeholders is the annual General Meeting.	During its long-standing presence on the capital market, PKN ORLEN has developed the practice of keeping almost continuous contact with its participants, and thus of engaging Stakeholders operating on this market. This holds particularly true for market analysts and investors, who have access to the Company's consultants and specialists virtually at all times. Representatives of the Company, including members of its governing bodies, hold regular meetings with Stakeholders, for instance during: - Quarterly earnings conferences, - Other corporate events. The Annual General Meeting is held once a year within six months of the end of each financial year

Customers

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
The ORLEN Group sells its products and services to customers across six continents. The customer base includes both private customers (such as motorists) and institutional accounts representing the chemical, automotive, aviation, power, construction, agricultural, packaging and food production sectors. For more information, see 'Responsibility towards customers'.	- Direct communication - Website and social media - Surveys to gauge the level of customer satisfaction, behaviours and attitudes as well as their expectations as to customer experience at the service stations	- In most cases, our relations with customers are long-term, and take the form of direct communication - Dialogue with customers, regular (bimonthly, annual and ad-hoc) customer surveys

Subcontractors and suppliers

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Subcontractors and suppliers provide raw materials and services necessary for the ORLEN Group to run its operations. Our purchases are related to investments, production and maintenance projects; we buy electricity, biocomponents, production chemicals, logistics services, supplies for service stations, and general-purpose supplies (administration, IT, professional services).For more information, see 'Responsibility towards suppliers'.	- Connect Procurement Platform - Corporate websites - Industry conferences, fairs, workshops with suppliers - Dialogue and building long-term relationships with suppliers, audits - Assessment by the ORLEN Group of relationships with key suppliers aimed at developing solutions to improve cooperation	- In most cases, our relations with suppliers and subcontractors are long-term, and take the form of direct communication - Meetings held when required during procurement processes and managing day-to-day cooperation with suppliers - Annual assessment by the ORLEN Group of relationships with key suppliers

Local communities

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Local communities comprise people living close to our production plants, storage infrastructure and locations where the ORLEN Group carries out its exploration and production activities. It is our closest environment, often including our employees, trading partners and their families. For more information, see 'Responsibility towards society'	- Social, educational, cultural and sports projects for local communities, implemented directly by ORLEN Group companies - Activities organised by the corporate foundations: the ORLEN – GIFT FROM THE HEART Foundation and the ANWIL for Włocławek Foundation Grant Fund for Płock - Employee volunteering campaigns - Investing in infrastructure - Consultation meetings with residents - Free Information System for the inhabitants of the Płock region	- Ongoing contact

ORLEN Group foundations

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
The ORLEN Group has established three corporate foundations: the ORLEN Foundation, the ANWIL for Włocławek Foundation, and the Unipetrol Foundation. For more information, see 'Responsibility towards society'.	The foundations, as public benefit organisations, operate within the scopes defined in their respective Articles of Association, which are available on their websites.	- Ongoing contact

Innovators and startups

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Leveraging the potential of startups and unlocking the resources of large corporations creates opportunities for: - Pilot testing of innovative solutions developed by small companies prior to potential commercialisation of modern technologies and solutions, - Unlocking the potential of PKN ORLEN employees to promote implementing innovation culture. For more information, sees 'Intellectual capital' and 'Research and technological development'.	- The innowacje@orlen.pl platform, through which third parties can submit innovative solutions, e.g. relating to fuels and petrochemicals, power generation or sales areas - Acceleration programmes as part of which PKN ORLEN gains access to innovative solutions developed by startups	- The platform: regular contact - Acceleration programmes: participation depends, among other things, on the schedules for acceptance of applications for the starting projects

Financial institutions

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Banks and insurance companies are important market participants as they determine the market's shape, dynamics and directions of development.	Winning and maintaining the confidence of financial institutions is one of the key factors for market success. Therefore, the ORLEN Group builds its relations with those institutions based on full transparency and long-term partnership.	- Regular contact

Regulators

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
The ORLEN Group operates on regulated markets, engaging in a fully transparent and open dialogue with the regulators based on applicable laws.For more information, see 'Regulatory environment'.	- Reviewing drafts of legislative solutions at the national and EU legislation level - Ongoing coordination of the Group's relations with the regulators, control and supervisory authorities, and a process for obtaining and managing permits and authorisations	- Regular contact

Certification bodies

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Institutions supporting businesses in standardising and optimising their operations. Through close cooperation with those institutions and thanks to their recommendations, the ORLEN Group obtains external confirmation of the standards it applies in various areas of its business, while our customers and trading partners may be certain that they deal with a proven and reliable organisation. For more detailed information, see 'Integrated Management System'.	- Reviews by certified third parties, confirmed by certificates of compliance of the Group's activities with international standards	- Periodically

Dealers and franchisees

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Dealers and franchisees contribute to the steady strengthening of the ORLEN Group's leading position in the retail fuel market. This Stakeholder group is also very important to customer perception of our brand. Our dealers and franchisees are highly diversified in terms of the scale and scope of their operations and business models.	The cooperation is underpinned by partnership and highest business standards. Dealers and franchisees can benefit from the more favourable terms of business with non-fuel suppliers negotiated by the Group. ORLEN-branded service stations operate under a range of business models, based on different business arrangements (COCO, CODO, DOFO, DODO). CODO stations are owned by a Group company (PKN Orlen, Unipetrol, Orlen Deutschland) and operated by a dealer who agrees to run the station on behalf of the network. All service station staff are employed by the dealer operating a given site. In Lithuania, all service station staff are employees of the network owner VENTUS; in the COCO model, staff are hired under employment contracts. In the DODO and DOFO models, a service station is owned by the company's trading partner, who is granted the right to use our brand and receives operational support under a dealership or franchise agreement. In most models, employees are not obliged to implement specific solutions, standards and procedures, however, based on partnership cooperation it is possible to provide business support and assistance in managing sales, purchases, shops and employees.	■ Regular contact

Industry and consumer organisations

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
We partner with organisations and associations, including industry, expert and business organisations. We maintain contacts with specialists involved in similar matters, which allows us to share our experience with other companies and take part in seminars and conferences. For more information, see section 'Responsibility towards society'.	■ Participation in the work of committees ■ Expert participation in academic seminars, discussion panels and conferences	■ Day-to-day contacts

Media

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
The media are the main channel used by the ORLEN Group to communicate with the Stakeholders, disseminate information on our achievements, plans and performance, and respond to any business-related enquiries and doubts. The media represent all Stakeholder groups	■ Virtual press office ■ Corporate websites and ORLEN Group companies' profiles in social media ■ Briefings, press meetings, field trips ■ The ORLEN Group online Integrated Report	■ Quarterly earnings conferences ■ Press meetings (as required) ■ Day-to-day contacts with media representatives

Competitors

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Market participants, entities against which the ORLEN Group's market position in individual operating segments is benchmarked. Given the international scale and fundamentals of the ORLEN Group's business, our key competitors include primarily companies operating in the refining, petrochemical, and power sectors as well as fuel retail chains in Central and Eastern Europe. For more information, see 'Competitive environment'.	■ Joint participation in the work of committees of trade organisations and associations ■ Expert participation in academic seminars, discussion panels and conferences	■ Regular contact

Scientific and research institutions and universities

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
These include scientific and R&D organisations, in particular higher education institutions with science faculties. ORLEN Group companies have teamed up with Polish institutions, including the Industrial Chemistry Research Institute, Warsaw University of Technology, University of Warsaw, Oil and Gas Institute, and Gdańsk University of Technology, and have also established educational centres abroad, including a modern R&D centre in Litvínov, the Czech Republic. For more information, see 'Research and technological development'.	■ Joint R&D projects ■ Research and conceptual work, analyses ■ Internships/work placements and recruitment of the best students and graduates ■ Cooperation with respect to research studies and student theses ■ Innovation Day – workshops with scientific organisations ■ ORLEN Knowledge Day, Case Week	■ Regular contract

NGOs

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
Organisations playing an increasingly important role in social and economic development of any country as an essential complement to state institutions. Strengthening their position through the transfer of knowledge and financial support is in the public's best interest. For more information, see 'Responsibility towards society'.	The ORLEN Group is active in that sector, both by supporting individual NGOs and by running its own corporate foundations: the ORLEN Foundation , the ANWIL for Włocławek Foundation, and the Unipetrol Foundation	■ Ongoing contact

Society

Characteristics	Type of Stakeholder engagement	Frequency of Stakeholder engagement
All Stakeholders, meaning the general public, affected by the ORLEN Group's activities. For more information, see 'Responsibility towards society'.	The main Stakeholder engagement methods are described above	■ Ongoing contact

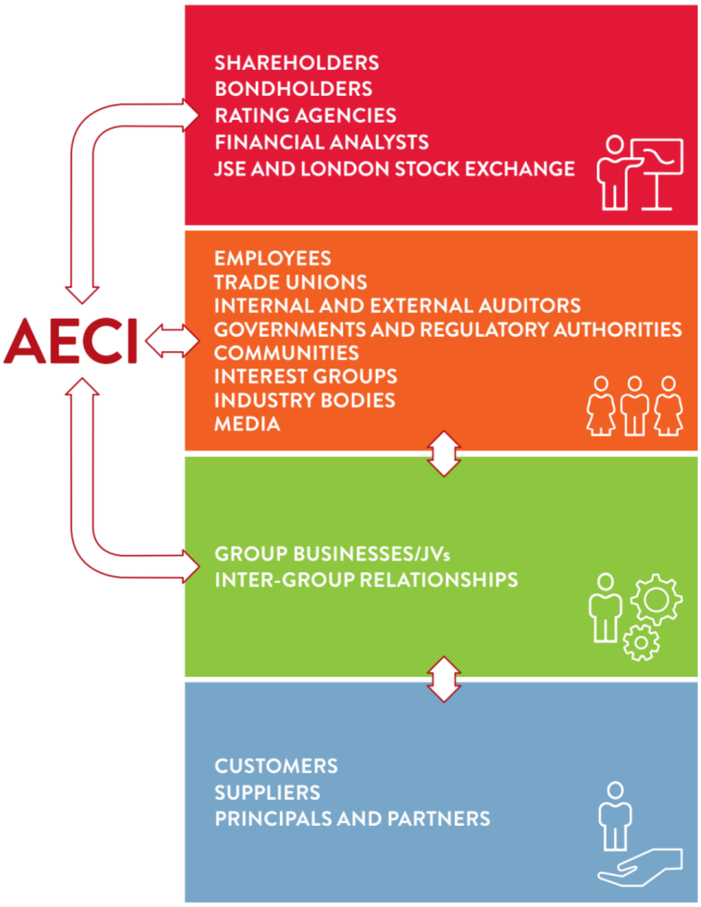
WHO WE ARE

OUR STAKEHOLDER ENGAGEMENT MODEL

Our businesses serve a spectrum of customers across the globe. This diversity is matched by an equally diverse range of stakeholders — those persons or groups who can affect or be affected by our activities.

Engagement with stakeholders is largely the domain of either AECI or of its individual businesses, but there are instances where engagement occurs at both levels. The approach to engaging with stakeholder groups and our efforts in this regard are summarised here.

ENGAGEMENT FLOWS



INTERACTION BETWEEN AECI AND ITS BUSINESSES

Two-way interaction between AECI and its businesses occurs on an ongoing basis, both formally and informally. All the operating entities report to the AECI Executive Committee ("Executive Committee") and, via this Committee, to the Board. Formal structures include operating entity Board meetings, business reviews and Executive Committee meetings. AECI's Executives, in their capacity as the Company's Executive Directors and/or Chairmen of businesses, are in attendance at most of these meetings, particularly for South African-based entities.

Other forums, such as pillar-specific or Group-wide conferences and management meetings, also provide opportunities for information sharing and relationship building. Examples are structures such as quarterly Financial Directors' forums that include representatives from all of the Group's businesses, including those based internationally, Human Capital meetings, and the IT forum and Steering Committee.

The Group's strength is enhanced by sharing best practice and experience in all areas of activity. A culture of collaboration across businesses encourages the streamlining and harnessing of efficiencies, including those enabled by centralised functions such as Human Capital, the Treasury, Legal and Secretariat and Strategic Sourcing. A common drive for excellence leads to better results for the businesses individually and for the Group as a collective.

STAKEHOLDERS WITH WHOM ENGAGEMENT IS MOSTLY VIA AECI

AECI AND SHAREHOLDERS, FUND MANAGERS, LENDERS, AND FINANCIAL ANALYSTS

AECI communicates with these stakeholders by way of a number of processes, including announcements released on the JSE's Stock Exchange News Service ("SENS"), the dissemination of financial results and reports electronically and in print, results presentations, business-specific presentations and site visits and one-on-one or small group meetings.

The Chief Executive, CFO and other Executive Committee members conduct timely presentations on the Group's performance and strategy to institutional investors, lenders, financial analysts and the media. The Executive Directors also undertake international roadshows in Europe and the USA, aimed at current and potential investors. Further, there are regular one-on-one meetings with this group of stakeholders.

Presentations, corporate actions and financial results, as well as any other information deemed relevant, are published on the Company's website. Stakeholders are advised of such newly-published items via SENS. Additional information on the Company, such as inter alia its management and governance policies and structures, is also available at www.aeciworld.com.

To ensure that shareholders without access to electronic communication are not prejudiced, AECI publishes and reports on details of its corporate actions and financial performance in at least one daily national English newspaper in South Africa as required by the JSE.

AECI, THE JSE AND THE LSE

As an entity listed in South Africa, AECI is required to comply with regulatory frameworks such as the JSE Listings Requirements, the Companies Act and the principles contained in King IV. Alignment with the latter principles is an ongoing and iterative process.

Compliance is managed largely through the Company's Legal and Secretariat and Corporate Communications functions. Interaction with the JSE is via Rand Merchant Bank as AECI's corporate sponsor in South Africa, when such sponsor input is required. Further liaison with the JSE, such as work related to assessments for inclusion in specific indices, is undertaken directly.

In addition to ordinary shares traded on the JSE, AECI has 3 000 000 cumulative preference shares denominated in pound sterling. Therefore, it **also has obligations opposite the London Stock Exchange**. To meet these obligations, all announcements released on SENS are also released in London via the Company's London Secretary, St James's Corporate Services.

STAKEHOLDERS WITH WHOM ENGAGEMENT IS VIA AECI AS WELL AS ITS BUSINESSES

THE GROUP AND ITS EMPLOYEES

The same information that is shared with investors and other financially-based stakeholders is made available to employees Group-wide. This takes place via communication in print, electronic media and personal interactions between the Group's leadership at all levels and the staff complement as a whole.

Across all businesses, Human Capital departments and Specialists are primarily responsible for the Group's policies, procedures and practices in employment, benefits and related human resource matters, and for the communication of these via established structures. At Group level, businesses participate in forums and structures dealing with, inter alia, Employment Equity and SHEQ-related strategies and performance tracking. The Chief Executive and the rest of the Executive Committee meet with the Group Employment Equity Committee, which includes representatives from all businesses in South Africa, on an annual basis.

THE GROUP AND TRADE UNIONS

The AECI Group subscribes to the freedom of association principle and recognises the right of all employees to join a trade union or other representative bodies of their choice without fear of harassment or discrimination of any kind. Unions participate in various consultative and negotiation structures that include, inter alia, Management/Shop Stewards Consultative Forums, Employment Equity and Skills Development Steering Committees and SHEQ Committees that deal with issues that affect employees' interests.

Businesses in South Africa are members of the National Bargaining Council for the Chemical Industry ("NBCCI"). Substantive collective agreements for the Bargaining Unit are negotiated on an annual basis, or within timeframes agreed in prior negotiations, with representative trade unions. In the AECI Group, owing to the nature of most operating entities, this is done mostly under the auspices of the NBCCI — Industrial Chemical Sector. Senior Employee Relations Managers from the Group participate in this forum as employer representatives.

In other countries employees have the same right to join representative bodies of their choice, where these exist.

THE GROUP AND INTERNAL AND EXTERNAL AUDITORS

This engagement is driven by good governance requirements, through compliance with relevant legislation and standards. It includes the limited assurance, undertaken annually for publication in the integrated report, of selected non-financial indicators which AECI believes are material in view of the nature of its businesses and the environment in which they operate.

The Directors are required in terms of the Companies Act and the JSE Listings Requirements to prepare annual financial statements which fairly present the state of affairs of the Company and the Group as at the end of the financial year period, in conformity with IFRS. The External Auditor is responsible for auditing the financial statements of the Company and its subsidiaries and for expressing its opinion on these statements to shareholders. In addition, the External Auditor is responsible for confirming whether the financial statements meet the requirements of the Companies Act and IFRS. In 2019, the External Auditor was also engaged to carry out an Agreed Upon Procedures Review in respect of the interim financial results to 30 June.

The Directors must ensure that Group entities maintain adequate accounting records, that an effective risk management process and internal controls are in place to safeguard the assets of the Group and to prevent and detect fraud and other irregularities. To enable the Directors to meet these responsibilities, management sets standards and implements systems of risk management and internal control aimed at reducing the risk of error or loss in a cost-effective manner.

The Group's Internal Audit function appraises the internal controls of Group businesses and submits its assessment of these to the Board on an annual basis.

The management team of each business also submits an annual self-assessment of internal control (Internal Control Matrix) to the Audit Committee affirming that the systems of internal control, in entities for which they have responsibility, are adequate for their operations and are functioning effectively. Internal Audit assesses the controls opposite this Matrix and reports thereon to the Audit Committee.

THE GROUP AND GOVERNMENT/ REGULATORY AUTHORITIES

AECI and its businesses are subject to the laws and regulations of the jurisdictions in which they operate. This means governments and regulatory authorities are able to have a significant influence on the Group as a whole or on one or more of its entities. As a consequence, the management of related matters through engagement with relevant authorities is a business imperative.

Such engagement may range from advocacy initiatives associated with the development of legislation and standards to cooperative work with those regulators who have the responsibility of governing the Group's activities through the application of these laws and standards. AECI and/or its businesses may choose to develop relationships with relevant government and regulatory entities in a proactive manner.

A significant step was taken in 2019 to enhance engagement with this key stakeholder Group and others. A Strategic Relationships Manager was appointed in the last quarter of the year. The experienced incumbent in this new senior role was tasked with reviewing the strategies, structures and processes in place and for recommending changes or improvements, as required, and for overseeing execution thereof. This will benefit AECI's brand not only with authorities but also among other stakeholders such as communities, uplifting them and benefiting the business at the same time. The food and water security project at Hammanskraal, northern Gauteng, in 2019 was an excellent example of what can be achieved through partnerships between diverse stakeholders.

In addition to interaction with all levels of government in South Africa, the Manager is also responsible for plans in support of Group businesses in the rest of the African continent, particularly in the areas of food security and chemical inputs for products that meet essential human needs.

All government engagement by AECI employees is subject to the Group's Code of Ethics and Business Conduct ("the Code") and associated Guidelines as approved by the AECI Board. The Code "is designed to provide clear guidelines for engaging with all stakeholders" and there is an explicit expectation that employees will have zero-tolerance to bribery and corruption. The statement that "AECI will not condone any violation of the law" is unequivocal. With respect to donations, the Code is clear that "no donations will be made to political parties and political candidates under any circumstances."

A second policy document of relevance is the Delegation of Authority Framework ("the Framework"). This document notes that the AECI Board "is ultimately accountable and responsible for the performance and affairs of the AECI Group … and derives its authority primarily from the (Company's) MOI as well as the general regulatory framework and common law". The Framework stipulates that subsidiary Boards and other high-level Committees have been set up to ensure, inter alia, "that the business entity is run in accordance with good corporate governance practices". The Framework is clear that "no delegation of authority may be exercised for any immoral or unlawful purposes". While naturally silent on the details of government engagement, the document clarifies governance roles and responsibilities in the Group.

THE GROUP AND COMMUNITIES

AECI has formal structures in place for engaging with its neighbouring communities. In the mid-1990s, the Umbogintwini Industrial Complex ("UIC") was the first site or business in the Group (and South Africa) to sign a formal charter with its neighbours. The charter sets out principles, responsibilities and procedures to serve as a framework for interaction between the parties.

Communities living within the footprint of influence of manufacturing and storage sites are most often concerned about the potential effects of site incidents and the management of these. Emergency preparedness and emergency response information, therefore, is shared with neighbours using channels such as local print and social media, site performance reports and invitations to participate in site-based emergency exercises. Their participation is via representatives mandated by communities to represent them in these matters.

Other interactions include local socio-economic development projects in the areas of education, health, the environment, charitable contributions, and skills and enterprise development. Often, contributions are not only in cash but also in the form of expertise and guidance. This is also true for a number of businesses beyond South Africa's borders. See further details in the commentary on Social and Relationship capital on page 46.

Communities in which the Group operates or has an interest in South Africa are the primary intended beneficiaries of the AECI Community Education and Development Trust.

THE GROUP AND SPECIAL INTEREST GROUPS

These stakeholders are often, but not always, aligned with communities in which the Group operates.

Although their engagement requirements often overlap with those of communities, their needs are recognised separately.

Wherever possible, these stakeholders are encouraged to participate in the Group's affairs via existing structures (liaison forums and the like). Where this is not possible separate arrangements are made to meet the needs of the stakeholders who, as a rule, are concerned mainly with matters broadly classified as being environmentally- and health-based. Arrangements include meetings, site/business visits and participation in/support of interest group initiatives.

Examples of interest groups in South Africa include the Modderfontein Conservation Society, the Wildlife and Environment Society of South Africa and residents' associations.

THE GROUP AND THE MEDIA

All issues pertaining to the Group and its stakeholders are of potential interest to the media in its role as a conduit for public information.

AECI's Corporate Communications function maintains contact with the media by disseminating relevant information proactively or in response to enquiries. Group businesses also interact with the media regarding matters specific to their operating sites or businesses. Other than in instances where media comment/coverage relates to marketing or product news, businesses are required to keep the AECI Head Office informed of likely coverage.

This is particularly true in instances where potentially controversial or negative comment is expected, or when it is possible that coverage will impact on/refer to the Group as a whole.

Where businesses do not have the necessary resources to deal with media requests or enquiries on their own, AECI's Corporate Communications function provides guidance or responds on that business' behalf after having confirmed the content of the response with management.

For communication in any situation which can be defined as a crisis or potential crisis (operational, industrial action, legal issues etc.), the preparedness of each business for such an eventuality is confirmed by annual Letters of Assurance submitted by the Managing Directors of Group businesses to the Chief Executive.

Depending on the type and scale of an emergency, AECI Head Office resources are made available to assist the affected operation or business. The hierarchy for escalating notifications of incidents, and subsequent progress reports, is clearly defined and has been communicated to all businesses.

THE GROUP AND INDUSTRY BODIES

AECI and its businesses participate in a number of initiatives and associations pertinent to all or some of their business activities. In this way, issues relevant to the sustainability of the Company or that of one or more of its businesses are addressed.

Initiatives include but are not limited to:

- longstanding membership of and involvement in SAFEX International, which aims to protect people and property against dangers and damage by sharing experiences in the global explosives industry. An AEL representative serves on the organisation's Board of Governors
- involvement in several structures and forums in the Chemical and Allied Industries' Association ("CAIA"). AECI's Chief Executive is a member of the CAIA Board
- active membership of the Responsible Care® Standing Committee
- active membership and leadership of the Process Safety Forums in KwaZulu-Natal and Gauteng for South Africa's chemical industry
- the Chemicals Handling and Environmental Forum is tasked with promoting responsible handling of chemicals throughout their lifecycle by providing a forum for stakeholders to discuss critical issues pertaining to the handling, storage, transport and distribution of hazardous chemicals. The Forum comprises representatives of CAIA member companies, government departments, other allied industry associations and various industry experts. AECI is represented at this Forum
- Responsible Care® is the global chemical industry's voluntary initiative for the continual improvement of performance in safety, health and environmental practices. It is a public commitment to the responsible management and stewardship of products and services through their lifecycle. It is also the vehicle used by the industry in its pursuit of improved product stewardship. CAIA is the custodian of Responsible Care® in South Africa, with more than 150 South African businesses being signatories. AECI is a signatory as are the Group's companies in South Africa in their own right. Signatories have their compliance with the Management Practice Standards verified by independent assurance providers
- participation in the CDP Climate Change and the CDP Water Programs. The CDP is a global initiative administered locally by the National Business Initiative. The CDP is an international voluntary disclosure programme. Data on greenhouse gas emissions and climate change response actions by business are collated on behalf of global investors. The CDP Water Program is aimed at catalysing sustainable corporate water management globally
- the Group is well represented in legislative forums in structures of the Chemical Industries Education and Training Authority ("CHIETA"). Subject matter experts represent AECI at employer organisations including the National Association of Speciality Chemicals Employers Association, the National Institute of Explosives Technology and the National Artisan Training Committee. These relationships optimise the Group's ability to make contributions that are suitable and beneficial to the sectors in which it operates.

STAKEHOLDERS WITH WHOM ENGAGEMENT IS MOSTLY VIA GROUP BUSINESSES

GROUP BUSINESSES AND CUSTOMERS/SUPPLIERS

Customer service and engagement is at the heart of the daily business of AECI's operating entities. It is fundamental to the value-add business model and, as such, it embraces the spectrum of business-related issues that could affect performance. It also addresses external considerations such as labour relations, socio-political imperatives and, in South Africa, B-BBEE matters.

Each Group business has a robust system in place to meet changes in customers' needs quickly and efficiently. Equally, relationships with suppliers are monitored continually and are modified as required to safeguard the supply chain as a whole. Terms of engagement with customers and suppliers are clearly defined and, where appropriate, Group-wide policies and procedures guide the businesses to ensure that customer- or supplier-related risks are properly understood and managed in line with AECI's risk appetite.

GROUP BUSINESSES AND TECHNOLOGY AND BUSINESS PARTNERS

Long-term technology and other agreements, as well as strategically advantageous partnerships, are one of the bases for the AECI Group's growth. Individual businesses engage with their principals and partners as a matter of course. Major changes, developments or opportunities are escalated to the Executive Committee and then to the Board, depending on the significance of the real or proposed change, development or opportunity.

This ensures that issues such as competitor and customer trends, economic conditions and industry trends, and the appropriateness of technologies, products and services are addressed.

102-40, 102-42, 102-43

STAKEHOLDER RELATIONS AND PRIORITY TOPICS

Our Stakeholders

We define the individuals and groups affected by our company's operations or the results of our operations as "relevant parties." Stakeholder communication is a vital element in our corporate governance approach. We ensure that our dialog is systematic, reasonable and practical with all our stakeholders including our employees, vendors, distributors, customers, suppliers, and private and public institutions. In our efforts to build strong relationships using effective methods, we identify who or which institution the relevant party is,

- the reason for their inclusion,
- their needs and expectations,
- our affected processes,
- priority level,
- control method,
- and reference (record/report/note),

and we review any change in the situation in management review meetings and quality circles.

Two-way communication is important for us, as it improves the efficiency of our integrated management systems as well. The following table describes our stakeholder groups and communication methods used to meet their needs and expectations.

102-40, 102-42, 102-43

STAKEHOLDER RELATIONS AND PRIORITY TOPICS

Our Stakeholders

STAKEHOLDER GROUPS	Polisan Employees	Investors	Media	Local Society	Non-Governmental Organizations	Universities	Business Partners	End Users	Distributors	Public Organizations	Suppliers
METHOD OF COMMUNICATION	Corporate Website, Social Media, Media, Corporate Social Responsibility (CSR) Activities, Corporate and Financial Communications, E-Newsletters, Surveys, Communication Boards, Portal	Corporate Website, Interviews, Press Releases, Financial Reports, Interim and Annual Activity Reports, Presentations, Material Disclosures, Meetings	Corporate Website, Corporate Social Responsibility (CSR) Activities, Advertising and Marketing Activities, Interviews and Talks, Press Releases	Corporate Social Responsibility (CSR) Activities, Donations and Sponsorships, Activity Reports, Press Releases	Corporate Website, Membership at Various levels, Joint Projects	Corporate Website, Scholarship and Internship Opportunities, Donations and Sponsorships, R&D and other Project Collaborations	Corporate Website, Social Media, Media, Distributor Meetings, Distributor Portal	Corporate Website, Social Media, Media, Fairs	Meetings and Interviews, Activity Reports, Surveys, Distributor Portal	Public Scrutiny, Activity Reports, Meetings and Interviews	Face to Face Meetings, Activity Reports, Supplier Audits

Priority Topics

Every year, we seek the opinions of our stakeholders through the call center and online surveys as part of our stakeholder dialogue, and we prioritize our sustainability efforts accordingly. To better inform our business partners, investors and society, we have identified priority topics, the issues that reflect the significant economic, environmental and social impacts of our company or which affect the evaluations and decisions of our stakeholders substantially. The table below lists the topics at which we have shown the best performance according to our stakeholders. As seen in the table reflecting the general results according to stakeholder groups, performance evaluations vary for each stakeholder.

Stakeholder Group	Performance Assessment Results
Polisan Management • Polisan Holding Management • Polisan Kansai Boya Management • Poliport Kimya Management • Polisan Kimya Management	1. Legal Compliance and Compliance with Other Regulations 2. Customer Confidentiality and Satisfaction 3. Importance Placed on Workplace Health and Safety 4. Anti-Corruption
Our Employees • Polisan Holding Employees • Polisan Kansai Boya Employees • Poliport Kimya Employees • Polisan Kimya Employees	1. Anti-Corruption 2. Legal Compliance and Compliance with Other Regulations 3. Customer Confidentiality and Satisfaction 4. Importance Placed on Workplace Health and Safety
Our Suppliers, Customers and Distributors • Polisan Kansai Boya Distributors • Poliport Kimya Customers • Polisan Kimya Customers • Polisan Kansai Boya Suppliers • Polisan Kimya Suppliers	1. Importance Placed on Workplace Health and Safety 2. Legal Compliance and Compliance with Other Regulations 3. Marketing Communication 4. Customer Confidentiality and Satisfaction

Appendix J - Commands in Software R (RStudio)

```
# install.packages("quantreg")
```

Individual analysis models (examples for the role of the State - st):

Stakeholder Engagement Level 1:

```
> summary(rq(data = ds2, tau = 0.10,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st,
   tau = 0.9, data = ds2)
```

Stakeholder Engagement Level 2:

```
> summary(rq(data = ds2, tau = 0.10,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.9, data = ds2)
```

Stakeholder Engagement Level 3:

```
> summary(rq(data = ds2, tau = 0.10,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
```

```
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st,
    tau = 0.9, data = ds2)
```

```
# Group analysis model (State, Financial Markets, Corporate Governance):
```

Stakeholder Engagement Level 1:

```
> summary(rq(data = ds2, tau = 0.10,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.25, data = ds2)
```

```
> summary(rq(data = ds2, tau = 0.50,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.9, data = ds2)
```

Stakeholder Engagement Level 2:

```
> summary(rq(data = ds2, tau = 0.10,
+           formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+           formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+           formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
```

```
+           formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.9, data = ds2)
```

Stakeholder Engagement Level 3:

```
> summary(rq(data = ds2, tau = 0.10,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+           formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg, tau = 0.9, data = ds2)
```

Complementary analysis model:

Stakeholder Engagement Level 1:

```
> summary(rq(data = ds2, tau = 0.10,
+           formula =  Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+             st + fm + cg + sc + hc), se = "ker")
```

Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+ formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+ formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+ formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+ formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level1 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.9, data = ds2)

Stakeholder Engagement Level 2:

> summary(rq(data = ds2, tau = 0.10,
+ formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+ formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
fm + cg + sc + hc, tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+ formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+ st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +

```
    fm + cg + sc + hc, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+            formula =  Engag.Level2 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level2 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.9, data = ds2)
```

Stakeholder Engagement Level 3:

```
> summary(rq(data = ds2, tau = 0.10,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.1, data = ds2)
> summary(rq(data = ds2, tau = 0.25,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.25, data = ds2)
> summary(rq(data = ds2, tau = 0.50,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.5, data = ds2)
> summary(rq(data = ds2, tau = 0.75,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.75, data = ds2)
> summary(rq(data = ds2, tau = 0.90,
+            formula =  Engag.Level3 ~ TRBC + log(Total.Assets.2019) +
+              st + fm + cg + sc + hc), se = "ker")
Call: rq(formula = Engag.Level3 ~ TRBC + log(Total.Assets.2019) + st +
    fm + cg + sc + hc, tau = 0.9, data = ds2)
```

Appendix K - Complementary Quantile Regression (without Human Capital)

	0.10			0.25			0.50			0.75			0.90		
	β	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**	**β**	**p**	**sig.**
Level 1															
(Intercept)	1.6	0.697		2.3	0.596		1.8	0.689		8.1	0.113		12.1	0.035	*
Chemicals	-0.1	0.959		0.3	0.851		0.5	0.777		1.8	0.322		5.2	0.012	*
Energy - Fossil F.	1.3	0.328		0.2	0.891		1.1	0.466		2.0	0.236		5.4	0.014	*
Mineral Resources	0.1	0.926		0.0	0.980		0.3	0.854		1.3	0.430		2.8	0.088	.
Total.Assets	-0.1	0.460		-0.1	0.780		0.1	0.537		0.1	0.695		0.1	0.682	
st	1.3	0.065	.	1.1	0.126		0.5	0.585		1.4	0.007	**	2.1	0.046	*
fm	0.1	0.895		0.8	0.079	.	1.7	0.000	***	2.4	0.000	***	3.2	0.000	***
cg	1.3	0.612		2.4	0.252		2.9	0.017	*	3.3	0.022	*	2.8	0.086	.
sc	3.2	0.018	*	4.3	0.002	**	4.5	0.003	**	3.3	0.028	*	1.9	0.276	
Level 2															
(Intercept)	-0.9	0.793		-1.3	0.761		0.7	0.883		8.3	0.112		11.3	0.075	.
Chemicals	-0.2	0.891		0.8	0.609		1.0	0.591		1.2	0.556		0.5	0.832	
Energy - Fossil F.	-0.9	0.434		-1.1	0.451		0.2	0.926		-0.9	0.641		0.9	0.686	
Mineral Resources	-1.1	0.305		-1.0	0.463		-0.2	0.914		-0.9	0.612		0.0	0.981	
Total.Assets	0.1	0.469		0.2	0.206		0.2	0.354		0.1	0.742		0.3	0.293	
st	-0.5	0.388		-0.4	0.608		0.5	0.575		0.2	0.811		0.3	0.842	
fm	0.6	0.123		1.3	0.006	**	2.0	0.000	***	2.8	0.000	***	3.9	0.000	***
cg	3.4	0.066	.	2.7	0.116		2.0	0.016	*	2.2	0.047	*	1.5	0.085	.
sc	1.6	0.185		2.5	0.083	.	5.1	0.005	**	5.4	0.002	**	4.8	0.053	.
Level 3															
(Intercept)	-5.2	0.046	*	-3.7	0.178		-2.4	0.370		-1.4	0.637		2.1	0.568	
Chemicals	0.8	0.312		0.6	0.480		0.4	0.718		1.0	0.386		2.1	0.056	.
Energy - Fossil F.	-0.3	0.750		-0.2	0.788		-0.1	0.901		-0.4	0.711		2.3	0.078	.
Mineral Resources	-0.8	0.292		-0.7	0.436		0.0	0.993		1.8	0.129		2.8	0.014	*
Total.Assets	0.2	0.040	*	0.1	0.204		0.2	0.051	.	0.3	0.031	*	0.2	0.408	
st	0.2	0.653		0.2	0.718		0.1	0.831		-0.5	0.455		-1.0	0.156	
fm	0.0	0.934		0.1	0.618		0.8	0.011	*	1.4	0.000	***	1.8	0.000	***
cg	2.0	0.046	*	3.0	0.002	**	2.0	0.012	*	2.7	0.002	**	4.9	0.000	***
sc	2.0	0.021	*	2.5	0.008	**	2.5	0.019	*	1.4	0.229		1.8	0.164	

Source: Research data (2023)