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Signaling Inclusivity: Unveiling the Determinants of Corporate LGBTQIA+ Inclusivity Through Signaling Theory

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Abstract

Aim: This study aims to explore how U.S. corporations signal their commitment to LGBTQ+ inclusivity, using signaling theory as a framework.

Methodology: By analyzing a dataset of 700 companies and utilizing the Corporate Equality Index (CEI) from the Human Rights Campaign, the research examines the role of sector characteristics and voluntary participation in inclusivity efforts.

Results: Through univariate analysis, instrumental variable (IV) regression, and Structural Equation Modeling (SEM), the study finds that consumer-facing sectors tend to signal a stronger commitment to inclusivity, reflected in higher CEI scores, while sectors with high injury risks show weaker or inverse correlations with inclusivity. Additionally, the findings highlight that the authenticity of inclusivity efforts – particularly voluntary reporting – is crucial, suggesting that genuine engagement, rather than mere compliance, enhances the effectiveness of inclusivity signaling.

Implications and recommendations: The implications for researchers include a deeper understanding of how sector dynamics and voluntary actions influence corporate inclusivity, while practitioners are advised to prioritize authentic engagement to effectively communicate their inclusivity values to stakeholders.

Originality/value: This research contributes to the literature by emphasizing the strategic importance of authentic inclusivity signaling in shaping corporate culture and external perceptions.

Keywords: Corporate Equality Index, signaling theory, corporate inclusivity policies, CSR

1. Introduction

In the dynamic landscape of corporate governance, the articulation and promotion of diversity and inclusivity initiatives, especially those championing LGBTQIA+ rights, have ascended to be of a paramount concern. This evolution is not solely a mirror to the shifting societal norms and legislative advancements, but also a strategic maneuver within the intensely competitive corporate sphere. The confluence of heightened societal recognition of LGBTQIA+ issues, evolving stakeholder expectations, and the ethical stance of corporations, underlines the critical role of LGBTQIA+ inclusivity not just as an ethical mandate but also as a strategic imperative in modern business practice.

The impetus for this research is twofold: first, to dissect the multifaceted determinants of LGBTQIA+ inclusivity within the framework of major U.S. corporations, and second, to apply an analytical lens through IV and structural equation modeling to scrutinize the inclusivity paradigms across a sample of approximately 700 leading corporations. The Corporate Equality Index from the Human Rights Campaign, encompassing both actively participating and non-participating companies, serves as a pivotal data source, enabling an exploration of the intentional managerial decisions that sculpt the corporate inclusivity landscape. The deliberate application of IV and SEM models is meant to elucidate the strategic choices corporations make in their inclusivity participation, thereby influencing their inclusivity profiles.

This study was set against a backdrop where LGBTQIA+ matters are increasingly prominent, subjecting companies to scrutiny from a diverse array of stakeholders, including consumers, investors, and advocacy groups. The endeavor to achieve tangible inclusivity within the corporate domain is a complex undertaking, influenced by a plethora of factors.

Drawing upon the seminal work of González et al. (2022), which probes into the determinants of LGBTQIA+ corporate policies and the divergent motivations behind firms' inclusivity efforts, this paper seeks to advance the discourse by incorporating two additional dimensions: the voluntariness of inclusivity participation, and a refined sector classification as detailed in Lopatta et al. (2022). This approach offers a panoramic view of sector-specific dynamics, unraveling the underlying motivations that drive corporate inclusivity signaling efforts. The nuanced sector categorization, encapsulating public scrutiny, consumer proximity, litigation risk, and injury risk, provides a sophisticated framework for dissecting the diverse motivations underpinning corporate inclusivity endeavors.

At the heart of this research is the application of signaling theory, which posits that organizations communicate information about their unobservable qualities or intentions through observable actions or signals (Connelly et al., 2011; Spence, 1978). By scrutinizing a series of hypotheses related to sector characteristics and voluntary participation, this study aimed to examine the signaling mechanisms through which companies convey their commitment to inclusivity. By employing signaling theory, this study intended to contribute to the theoretical discourse on corporate signals and stakeholder perceptions by verifying these hypotheses, thereby illuminating the intricacies of signaling theory as it pertains to inclusivity efforts.

The paper starts with a discussion on the theoretical background, which sets the stage for understanding the motivations behind corporate inclusivity efforts. Following this, the author outlines the hypotheses that guide the study, each of them formulated to explore different aspects of signaling theory in the context of corporate inclusivity. The methodology section begins with an overview of the Corporate Equality Index used to measure inclusivity and introduces the approaches used in this research, including univariate analysis, instrumental variable analysis, and structural equation modeling. As the paper progresses, it presents the empirical findings, delves into their implications, and suggests directions for future research. The conclusion brings together the key insights from the study, offering a concise summary of the findings and their contribution to the field.

2. Literature Review

2.1. Signaling Theory in CSR

Signaling theory, originally conceptualized in the realm of economics, offers a robust framework for understanding how entities communicate their intangible qualities in scenarios characterized by information asymmetry. This theory, first introduced by M. Spence (Spence, 1978) in the context of the job market, posits that individuals or organizations can convey their hidden attributes through observable actions or signals, thus reducing informational disparities between parties. The theory has found extensive application across various domains, including corporate CSR (Connelly et al., 2011).

The essence of signaling theory lies in the dynamics between the ’sender,’ who decides on the transmission of information, and the ’receiver,’ who interprets this signal. This interplay is pivotal in contexts like CSR, where the authenticity and clarity of the communication can significantly influence stakeholder perception (Connelly et al., 2011). The work of Hetze (2016) provided a robust framework for understanding CSR reporting as a form of CSR communication, intricately filtered by the signaling context and shaped by stakeholders’ perceptions.

In the corporate sphere, signaling theory sheds light on how firms articulate their value propositions and reliability to a broad audience, including investors, customers, and employees. This is especially relevant in markets where product or service quality is not immediately apparent, thus bridging the inherent information asymmetry. Firms may leverage various channels like financial disclosures, brand reputation, and leadership quality to project their strength and dependability.

CSR initiatives allow firms to signal their commitment to ethical practices, social welfare, and environmental stewardship. These endeavors not only fulfill moral obligations but also strategically position firms in the marketplace, bolstering their reputation and fostering trust among stakeholders. Empirical evidence, such as that presented by Torugsa et al. (2013), highlights the efficacy of strategic CSR activities as potent signals of a firm’s dedication to sustainable and socially responsible practices. Zerbini (2017) further showed how CSR communication serves as a heuristic, enabling stakeholders to infer the underlying ethical stance of a business, thereby guiding their interactions. Moreover, Dhaliwal et al. (2014) stressed the pivotal role of transparent and comprehensive CSR reporting in influencing investor decisions, highlighting the critical importance of credible signaling in the financial domain.

However, the path of CSR signaling is fraught with challenges. Differentiating genuine CSR efforts from mere strategic marketing maneuvers poses a significant challenge, often breeding skepticism among the well-informed and critical stakeholder base. For instance, Du et al. (2010) contended that the impact of CSR as a signal largely depends on stakeholders’ perceptions of its genuineness, with authentic initiatives notably enhancing corporate repute and stakeholder trust. Conversely, insincere or superficial endeavors, often labeled as ‘greenwashing’, can tarnish a firm’s image and erode trust (Mahoney et al., 2013). Servaes and Tamayo (2013) further elaborated that the positive correlation between CSR and firm value is more pronounced in entities with high customer awareness, highlighting the nuanced interplay between stakeholder awareness and corporate reputation.

The efficacy of signaling, particularly in the context of CSR, is also contingent on the operational environment. For instance, in emerging economies, CSR practices serve as affirmative signals to investors about a firm’s capability to navigate institutional voids, thereby augmenting financial performance. This effect is notably pronounced in contexts characterized by underdeveloped capital markets and limited information diffusion (Su et al., 2016; Bae et al., 2018). This stresses the variability of CSR’s signaling effectiveness across different geographical and regulatory landscapes.

To sum up, signaling theory offers a profound lens through which CSR initiatives can be evaluated, underscoring the strategic role of CSR in corporate communication and stakeholder engagement. As firms traverse the complexities of contemporary markets and societal norms, adeptly navigating and leveraging CSR signaling becomes imperative in cultivating sustainable, trustworthy, and competitive business models.

LGBTQ+ inclusivity policies within corporations are increasingly recognized as integral to comprehensive CSR strategies. Similar to broader CSR efforts aimed at enhancing environmental, social, and governance (ESG) outcomes, LGBTQ+ inclusivity initiatives are geared towards creating a diverse and inclusive workplace environment. Such policies not only affirm a commitment to ethical and progressive values but also contribute to bolstering corporate reputation, enhancing employee satisfaction, and potentially improving financial performance by attracting a diverse talent pool and customer base. Like CSR initiatives, LGBTQ+ inclusivity efforts can significantly influence stakeholder relationships and financial metrics, thereby fostering a more inclusive, equitable, and sustainable business ethos (Aguinis & Glavas, 2012; Van Beurden & Gössling, 2008; Zhou, 2021).

2.2. Key Determinants of LGBTQ+ Inclusivity

Formulating LGBTQ+ corporate policies involves navigating a complex interplay of internal organizational factors and external societal pressures. Building upon the detailed empirical findings by González et al. (2022), this paper identified and analyzed the key factors associated with the crafting of LGBTQ+ corporate policies. It focuses on the alignment between a company's internal principles and the wider societal norms, and systematically tests hypotheses to understand these relationships better.

2.2.1. Legal and Regulatory Environment

The prevailing legal and regulatory environment is a critical determinant of LGBTQ+ corporate policies, as highlighted by González et al. (2022). Companies adapt their policies to the legal requirements, demonstrating a commitment to LGBTQ+ rights and legal compliance. Those located in regions with strong legal protections for LGBTQ+ individuals often have more inclusive policies, highlighting the crucial role of legal frameworks in corporate inclusivity efforts.

Incorporating insights from Scott (2013) and Xu and Shenkar (2002), this study also considered the concept of institutional divergence, which highlights the variations in legal and cultural institutions across regions. The political orientation of a company's headquarters reflects this divergence, impacting its LGBTQ+ inclusivity approach. Aligning policies with regional legal and societal norms not only ensures compliance, but also serves as a signal of inclusivity commitment, enhancing a company's reputation and legitimacy.

The literature further suggests that firms in jurisdictions with comprehensive legal protections for LGBTQIA+ individuals tend to exhibit more progressive inclusivity policies, emphasizing the significant influence of legal frameworks on corporate behavior in terms of LGBTQ+ inclusivity efforts (Everly & Schwarz, 2015; Choi et al., 2023). This reflects the interaction between organizational practices and the institutional environment, where firms balance legal, social, and ethical considerations in policy development.

In this paper, this area was covered by the political leanings of the state in which the company headquarters are located. Similarly to the source paper, the value represents the difference in the proportion of votes cast for Democratic and Republican candidates at state level, assuming that the combined total of Democratic and Republican votes equals 100%. A positive value signifies a state with more liberal leanings, while a negative value suggests a state taking a more conservative stance. These political tendencies remain constant between general elections, maintaining their midpoint values during the intervening years.

Companies in regions with a more liberal outlook, indicated by a positive difference in the proportion of votes for Democratic versus Republican candidates, are more likely to align their LGBTQ+ policies with progressive societal norms and legal standards, enhancing their legitimacy and signaling a commitment to inclusivity.

2.2.2. Organizational Dynamics

An internal determinant highlighted in the source paper was the role of organizational culture and leadership in driving LGBTQ+ inclusivity. Corporate culture sets the tone for inclusivity and acceptance of LGBTQ+ employees. When leadership actively champions LGBTQ+ rights, it sends a signal throughout the organization.

This approach corresponds to the cognitive elements of institutions that describe the internalized values that the organization wants to follow themselves (Palthe, 2014). In González et al. (2022), CEO's political leanings were a reflection of these values, however the results obtained did not confirm that such a relationship could occur. This could mean that either Cognitive Institutional Theory does not apply in this case, or the choice of CEO is dictated by the strongest political leanings of the region, i.e. the more liberal the region, the more liberal the selected CEO. As a result, this aspect was not explored in this research.

2.2.3. Company Size

The visibility of larger corporations on the national and international stage places them under increased public scrutiny. As a result, these companies face greater expectations to demonstrate their commitment to LGBTQ+ rights and inclusivity. Non-participation or a lack of robust LGBTQ+ policies can be more damaging to the reputation of these prominent organizations. Therefore, it is expected that larger firms are more likely to engage in extensive LGBTQ+ inclusivity measures to align with societal expectations and safeguard their public image (Udayasankar, 2008; González et al., 2022). Large companies are also more likely to have well-established HR policies which can facilitate the implementation of LGBTQ+ inclusive practices. This aspect is measured by the company's employment, i.e. the natural logarithm of the number of employees.

2.2.4. Company Age

The age of a firm is another significant determinant connected with LGBTQ+ corporate policies that needs to be included in the study as a control variable. Research by Withisuphakorn and Jiraporn (2016) suggested that older firms, with more predictable performance and more established processes, are generally more likely to engage in CSR initiatives (similarly to company size). However, when it comes to LGBTQ+ policies, company age may have the opposite effect also due to potentially more traditional values (González et al., 2022). Thus the relationship between company age and LGBTQ+ policy adoption warrants careful examination, considering the potential clash between historical corporate values and contemporary inclusivity expectations.

2.2.5. Financial Variables

A firm's financial health, indicated by metrics such as return-on-assets (ROA), Tobin's Q, and the debt-to-assets ratio, plays a crucial role in its capacity to engage in LGBTQ+ inclusivity initiatives. Financial stability provides firms with the resources necessary to support a range of LGBTQ+ initiatives, from employee benefits to community engagement efforts (González et al., 2022). Well-performing companies are expected to be more proactive in implementing inclusive policies, leveraging their financial health as a foundation for broader inclusivity efforts. Moreover, a lower debt-to-assets ratio may afford them greater flexibility to invest in inclusivity initiatives, unencumbered by the constraints of debt financing. Tobin's Q was employed as an indicator of a company's financial standing, with ROA and long-term debt to assets serving as instrumental variables to address potential endogeneity concerns in the IV model.

Another finance-related characteristic is the company's investment in Research and Development (R&D). Following (Pichler et al., 2018), in firms that prioritize R&D, the need for highly skilled and specialized labor is paramount. LGBT-supportive policies can serve as a strategic tool for attracting and retaining this valuable workforce, creating a competitive advantage in labor markets where specialized skills are in demand. This alignment between inclusivity efforts and R&D engagement reflects “social investments in a competitive context” (Garriga & Melé, 2004), where socially responsive policies are leveraged to enhance recruitment, reduce turnover, and cultivate long-term commitment among highly skilled employees.

2.2.6. External Stakeholder Pressures

External stakeholder pressures, including consumer expectations and investor demands, play a pivotal role in shaping corporate policies related to LGBTQ+ inclusivity. Companies navigate a complex landscape where their stance on LGBTQ+ issues can spark discussions and potentially polarize opinions, as noted by Pichler et al. (2018). This diversity in societal views influences corporate approaches to inclusivity, which is subsequently reflected in their inclusivity metrics.

This study leverages signaling theory to understand how firms respond to these external pressures through strategic inclusivity signaling. Two primary indicators were used to capture this response: a time trend variable representing the evolving societal push for inclusivity, and voluntary participation in the Human Rights Campaign Corporate Equality Index Report. The time trend variable shows how businesses adapt to the changing societal landscape, aligning with the growing emphasis on inclusivity, especially among younger generations who prioritize diverse and inclusive workplaces. Reports such as The Deloitte Global 2023 LGBT+ Inclusion @ Work (Deloitte, 2023) and findings from the U.S. Chamber of Commerce Foundation (U.S. Chamber of Commerce Foundation, 2023) emphasize the market-driven need for businesses to develop and showcase inclusive practices. As a result, more and more businesses are looking to develop and evaluate their LGBTQ+ inclusive practices with expert knowledge and data-driven approaches. The trend is also visible through engagement in the Corporate Equality Index used in this study. As reported by the report issuer, “the number of employers officially rated has expanded from 319 original participants to a current participant count of 1384, encompassing all major industry sectors” (Human Rights Campaign Foundation, 2023b).

The concept of voluntary active participation in the CEI study was central to this research, encapsulating the essence of signaling theory. Firms that choose to participate are signaling their proactive stance on LGBTQ+ inclusivity, leveraging this as a strategic asset to attract talent, engage stakeholders, and enhance their competitive edge. This voluntary disclosure becomes a deliberate signal to the market and stakeholders about the firm’s values and commitment to inclusivity. Conversely, firms that opt out of active participation may inadvertently signal a lack of prioritization of LGBTQ+ inclusivity, potentially impacting their reputation and stakeholder relations.

This relationship is modeled by a variable Voluntary equal to 1 when a company actively participated in the study upon the HRC’s invitation, and 0 – if it declined and the index for the company was constructed without its active participation.

This nuanced approach to understanding corporate signaling in the context of LGBTQ+ inclusivity provides insights into the strategic considerations firms make in response to external pressures. By analyzing the implications of voluntary disclosure through the lens of signaling theory, this study aimed to shed light on the complex dynamics at play in corporate inclusivity efforts and their broader implications for stakeholder engagement and corporate reputation.

2.2.7. Industry Type and Competitive Dynamics

The extent of LGBTQ+ inclusivity across various industries is significantly influenced by each sector’s unique characteristics and the dynamics of competition they face. Industries under high public scrutiny, especially those directly engaging with consumers, can utilize inclusivity as a strategic tool to align with consumer expectations. This alignment is not merely a response to market demand, but rather a deliberate form of signaling to stakeholders about the company's commitment to diversity and inclusivity. Such signaling is particularly crucial in consumer-facing sectors, where brand perception directly influences consumer choice and loyalty.

On the other hand, sectors like finance which navigate a landscape fraught with litigation risks, may adopt inclusive policies as a pre-emptive measure. Here, inclusivity signaling serves a dual purpose: it mitigates potential legal challenges and reputational risks, and it communicates to stakeholders a broader commitment to ethical and responsible business practices.

This study built upon the groundwork laid by González et al. (2022), extending the inquiry into how diverse industry-specific drivers influence corporate inclusivity policies. Moving beyond the binary of consumer-facing (B2C) and business-facing (B2B) companies, the author examined a wider array of sector-specific influences on inclusivity signaling, and aimed to uncover how companies within different industries leverage inclusivity as a signal to navigate their unique competitive landscapes and stakeholder expectations.

In exploring these sector-specific drivers, the research focused on the strategic use of inclusivity signaling within industry contexts. This nuanced exploration goes beyond treating these drivers as mere control variables, positioning them at the forefront of the investigation into corporate signaling strategies. Through this lens, the study seeks to offer deeper insights into how competitive dynamics and industry pressures shape the ways in which companies signal their commitment to inclusivity, thereby influencing stakeholder perceptions and competitive advantage in the marketplace.

2.3. Development of Hypotheses

In the realm of corporate LGBTQ+ inclusivity, the strategic signaling of inclusivity efforts is influenced by a variety of factors, including sector characteristics, public scrutiny, and the company's decision to voluntarily participate in inclusivity benchmarks like the CEI study. The interplay of these elements offers a rich tapestry for understanding how companies navigate the complex landscape of inclusivity signaling.

The decision to voluntarily participate in the CEI study is a pivotal aspect of this research, highlighting the role of signaling theory in corporate inclusivity efforts. Companies that opt into the CEI are actively signaling their commitment to LGBTQ+ inclusivity to both the market and stakeholders. Conversely, firms that abstain from active participation may inadvertently signal a lesser prioritization of LGBTQ+ inclusivity. This dynamic is captured by the 'Voluntary' variable, assigned a value of 1 for companies that actively participate in the CEI upon invitation, and 0 for those that do not, resulting in the CEI score being constructed without their active engagement.

The sector classification presented in Table 1 follows the framework established by Lopatta et al. (2022) and Branco and Rodrigues (2008). This classification is not a novel contribution of this paper but is rather adopted directly from the literature to ensure consistency and credibility of the approach. Lopatta et al. (2022) primarily focused on human rights disclosure, while Branco and Rodrigues (2008) discussed factors influencing Corporate Social Responsibility. However, the categorization they provide is widely applicable across various CSR domains, including LGBTQ+ inclusivity. Thus, the sectors are grouped according to their established motives in these studies, which are pertinent to the broader context of CSR. The categorization itself and rationale behind different types of sector sensitivity can be summarized as follows.

- The degree of consumer proximity is characterized as high when companies operate in industries closely connected to end consumers, and when these companies are expected to be recognized by the general public (Branco & Rodrigues, 2008).
- Certain industries (the so-called 'sin' industries), such as those associated with alcoholic beverages, tobacco, gambling, defense, nuclear energy, and extractives, tend to face heightened public scrutiny due to perceived moral concerns (Grougiou et al., 2016). Some of the classifications are however not as straightforward. For instance, this group also includes the apparel industry

regarding which there are often moral debates in the public sphere (Hwang et al., 2015), where not the product itself is considered immoral, but the conditions in which it manufactured and its impact on the environment. In the case of the food industry, there is the issue of omnipresent junk food that causes this industry to be considered a 'sin' sector. In general, all companies classified as of high public scrutiny can be viewed as a negative impact on the environment, health and safety.

- Sectors like extractives, food and beverages, financials, information technology, and security services are particularly susceptible to human rights litigation related to complicity in human rights abuses (Černič, 2010).
- The risk of workplace injuries in a particular industry is assessed using a list of high-risk industries issued by the Workers' Compensation Regulator of Queensland, Australia. This assessment includes not only physical injuries, but also psychiatric and psychological disorders, as detailed by WorkCover Queensland (2014).

Table 1. Summary of sector classification in the dataset

Sector	Number of employers	Relative share in data	Public scrutiny	Consumer proximity	Litigation risk	Injury risk	Mean CEI
Apparel	9	0.01	High	Low	Low	High	75.17
Business services	47	0.07	Low	Low	Low	Low	86.41
Chemicals	62	0.09	Low	Low	Low	High	70.19
Energy	50	0.07	Low	High	High	High	63.93
Engineering & construction	11	0.02	Low	Low	Low	High	34.38
Financials	15	0.02	Low	Low	High	Low	63.65
Food, beverages & tobacco	30	0.04	High	High	High	High	76.89
Health care	16	0.02	Low	Low	Low	High	48.02
Hotels, restaurants & leisure	37	0.05	Low	Low	Low	Low	80.45
Industrials	98	0.14	Low	Low	Low	High	74.50
Materials	49	0.07	Low	Low	Low	High	47.84
Media	37	0.05	Low	Low	Low	Low	75.13
Retailing	82	0.12	Low	Low	Low	Low	64.86
Technology	42	0.06	Low	Low	High	Low	79.68
Telecommunications	20	0.03	High	Low	High	Low	73.67
Transportation	64	0.09	Low	Low	Low	High	60.50
Wholesalers	41	0.06	Low	Low	Low	Low	44.56

Source: own work.

In the context of LGBTQ+ inclusivity in companies, there are several factors that may drive a variation in corporate inclusivity efforts across different sectors. Just as higher corporate visibility and sector sensitivity were examined in Lopatta et al. (2022) as drivers of corporate human rights disclosure, hypotheses specific to LGBTQ+ inclusivity signaling can be formulated. While general visibility may result from factors such as the size of the company, and its prominence in the industry, in some sectors scrutiny may be in-built into the type of operations of the company – namely companies with higher visibility may face increased scrutiny and pressure to demonstrate their commitment to LGBTQ+ inclusivity. All the four types of sectors are listed above, but the specific motive for this sensitivity and visibility differs between the groups.

H1: Companies with high consumer proximity signal higher LGBTQ+ inclusivity.

Businesses in sectors with close consumer interactions are hypothesized to have a positive correlation with higher levels of LGBTQ+ inclusivity. The rationale involved this hypothesis is that companies in consumer-facing sectors may use inclusivity as a strategic means to appeal to a broad and diverse customer base, thus utilizing inclusivity as a competitive advantage.

This relationship was already empirically tested in González et al. (2022) by including a variable for B2C companies. The general reasoning for this type of impact was the need to appeal to a large group of individual decision makers, and therefore maintaining an image acceptable to the mass-market customers (Cowen et al., 1987).

H2: Companies with high public scrutiny signal higher LGBTQ+ inclusivity

Industries that are under heightened public scrutiny, such as those often labeled as 'sin' industries, are expected to utilize LGBTQ+ inclusivity initiatives as a means to counteract negative perceptions and affirm their commitment to social responsibility. This hypothesis posits that there is a positive association between high public scrutiny and the level of LGBTQ+ inclusivity, as companies endeavor to balance moral concerns with progressive social practices.

In Grougiou et al. (2016) it was found that sin industry companies tend to issue standalone CSR reports more than others, probably with the aim of distracting attention from their controversial activities. However, as LGBTQ+ inclusivity is a more dividing issue, it is not known if such a result translates to this problem in a straightforward way.

H3: Companies with high litigation risk signal higher LGBTQ+ inclusivity

Companies operating in sectors with high litigation risks related to human rights abuses might signal their broader commitment to human rights through the adoption of LGBTQ+ inclusivity policies. This approach is anticipated to help reduce legal vulnerabilities and affirm the company's dedication to ethical practices.

In Schrempf-Stirling and Wettstein (2017), it was suggested that the threat of litigation alone has a positive effect on corporate human rights commitment through, e.g. motivating stakeholders. In the political and social landscape of 2023, the voices that pointed out that LGBTQ+ rights were of identical nature and should be perceived strictly as human rights present in social and scientific discourse (Langlois, 2020; Gerber & Gory, 2014).

The most powerful testament to the idea that LGBT rights are an integral part of human rights is the UN campaign "Free & Equal" (Office of the United Nations High Commissioner for Human Rights, 2023). Launched by the United Nations in 2013, this campaign aims to promote equal rights and fair treatment for lesbian, gay, bisexual, and transgender individuals worldwide. It underlines the fundamental principle that all people, regardless of their sexual orientation or gender identity, are entitled to the same human rights and dignity. By highlighting the importance of acceptance, understanding, and legal protection for LGBT individuals, the "Free & Equal" campaign reinforces the notion that the struggle for LGBT rights is, at its core, a fight for basic human rights principles, including equality, non--discrimination, and the right to live free from violence and persecution.

H4: Companies with high injury risk signal higher LGBTQ+ inclusivity

Business in sectors characterized by high injury risks are hypothesized to signal their commitment to employee well-being through the adoption of inclusive policies. This suggests that such companies value all aspects of employee safety and health, including the cultivation of an inclusive workplace culture.

By exploring these hypotheses and the role of voluntary participation in the CEI study, this study seeks to shed light on the multifaceted nature of inclusivity signaling within the corporate sector. The investigation into these drivers provides insights into how varying levels of LGBTQ+ inclusivity are achieved across different industries, highlighting the strategic considerations companies make in their inclusivity signaling efforts.

3. Methodology

The methodology section outlines the approach taken to explore the relationship between sector characteristics, voluntary participation, and the signaling of LGBTQ+ inclusivity in U.S. corporations, using the Corporate Equality Index (CEI) as a primary measure. This paper employed a combination of three frameworks to analyze data from 700 companies. The section begins by defining the CEI and its relevance as an inclusivity metric, followed by a detailed description of each analytical method used to assess how companies signal their commitment to LGBTQ+ inclusivity.

3.1. LGBTQ+ Inclusivity Measurement

Among all corporate measures of inclusivity, the CEI (Human Rights Campaign Foundation, 2023a) stands out as a quantifiable benchmarking instrument, a rarity in the fields of Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) assessment. Since its inception in 2002, the CEI has been administered annually by the Human Rights Campaign (HRC) Foundation, a leading nonprofit organization focused on LGBTQ+ rights and advocacy. Through its established methodologies, the CEI evaluates how corporations address policies and practices aimed at fostering a supportive and inclusive environment for LGBTQ+ employees and their families.

CEI assesses mid to large businesses, and encompasses over a thousand employers in the United States, a prerequisite being employment of 500 or more full-time U.S. workers. The largest and most successful U.S. employers are invited to participate in the CEI and are identified through the lists of Fortune magazine's 1,000 largest publicly and privately-traded businesses, and American Lawyer magazine's top 200 revenue-grossing law firms. Other firms can opt in to participate as long as their employee criterion is fulfilled.

Invitations are sent annually, and responses are reviewed to ensure consistency, with assistance provided by HRC staff. Surveyed companies submit documentation to verify their policies, and HRC cross-checks results against public records, case law, and news accounts, particularly scrutinizing connections to anti-LGBTQ+ activities or policy efforts that could undermine inclusivity. Notably, the CEI is the basis for designating companies as "Best Places to Work for LGBTQ Equality".

If companies do not respond to survey invitations they may still receive unofficial ratings based on independent research. Fortune 500 companies that consistently decline to participate are independently rated and marked with unofficial ratings, ensuring that the public has access to accurate information about major employers.

The CEI's criteria are structured around four pillars:

- **Nondiscrimination Policies Across Business Entities:** This pillar assesses the presence of explicit nondiscrimination policies regarding sexual orientation and gender identity, aiming to ensure equal opportunities and diverse talent acquisition.
- **Equitable Benefits for LGBTQ+ Workers and Their Families:** This criterion evaluates employer-provided healthcare coverage, non-healthcare benefits, and transgender-inclusive healthcare benefits.
- **Supporting an Inclusive Culture & Corporate Social Responsibility:** This pillar scrutinizes LGBTQ+ inclusion practices, such as diversity training, gender transition guidelines, and LGBTQ+ community outreach, while also assessing companies' CSR standards related to the LGBTQ+ community.
- **Punitive Criterion:** A punitive dimension deducts points when a company is found to discriminate against the LGBTQ+ community publicly.

In addition to self-reported survey data, HRC conducts thorough checks on companies' records for actions that might negatively impact on LGBTQ+ rights, including corporate donations to anti-LGBTQ+ organizations, opposition to inclusive policies, or any association with public anti-LGBTQ+ actions. This extensive verification process makes the CEI a credible benchmark, allowing companies to publicly demonstrate their commitment to LGBTQ+ inclusivity and providing stakeholders with transparent insights into corporate policies.

The CEI has been widely adopted as a valuable measure for understanding the impact of LGBTQ+-friendly policies on organizational outcomes, including innovation, brand reputation, and employee satisfaction (Hossain et al., 2020; Shan et al., 2017; Fatmy et al., 2022). Studies have linked high CEI scores to improved firm performance, illustrating the role of inclusivity in attracting diverse talent and fostering a supportive work environment.

It can be argued that such an externally measured index can serve as an effective signaling tool by providing a transparent and objective assessment of a company's commitment to inclusivity. This external validation offers stakeholders a credible benchmark, enhancing the firm's reputation and trustworthiness in promoting diversity and inclusion. It also eliminates any false signaling stakeholders might be hesitant about.

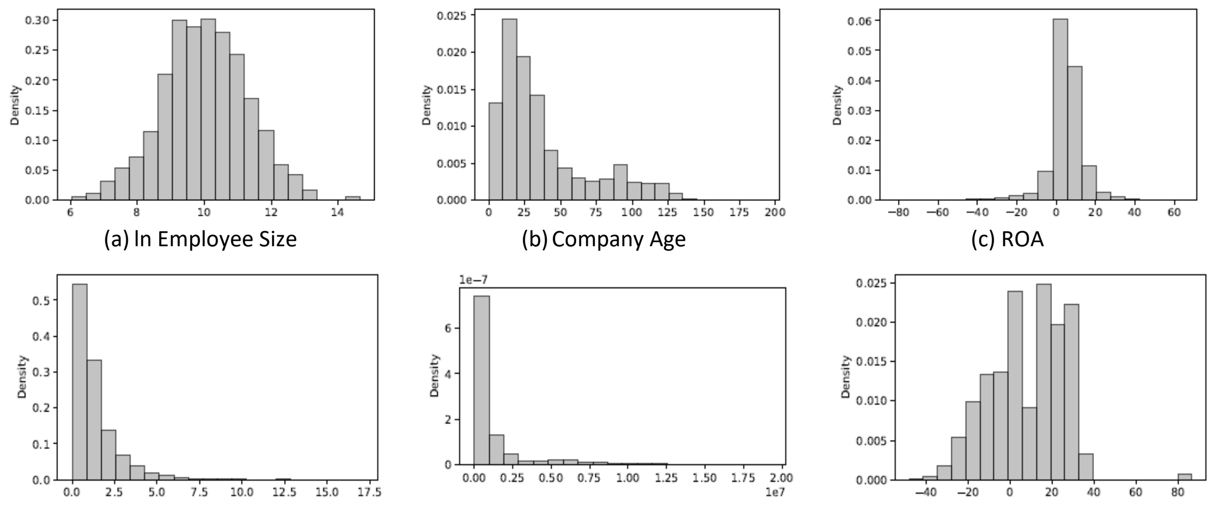
In this study, the CEI was utilized due to its comprehensive historical data and extensive coverage of large companies, making it an ideal tool for analyzing LGBTQIA+ inclusivity. The sample covered the period from 2011 to 2021, with a focus on both voluntary and non-voluntary participants. Notably, voluntary participation data was only included starting in 2011, adding a layer of reliability to the CEI scores analyzed. This long-standing index provides a robust and transparent measure of corporate LGBTQ+ inclusivity, allowing to evaluate inclusivity as both a strategic asset and a social commitment.

3.2. Approach

The author adopted a dual-dataset approach to delve into the intricacies of corporate LGBTQ+ inclusivity signaling, guided by the principles of signaling theory. The approach comprised a foundational dataset for econometric analysis and an extended dataset for univariate exploration, each serving distinct analytical purposes within the framework of signaling corporate inclusivity efforts. Both datasets are unbalanced panels dictated by CEI availability in a given year.

3.3. Dataset Description

The econometric dataset with all the required variables reported, sourced from the CEI reports and the Orbis Database, included 2,141 observations across 319 employers, with an average of 6.7 observations per company, whereas the extended dataset was more comprehensive, featuring 4,855 entries across 710 employers, averaging 6.83 observations per company. Both datasets covered 2011-2021, a period critical for understanding the HRC's reporting on company participation, either voluntary or mandatory, in their report.



(a) ln Employee Size (b) Company Age (c) ROA

(d) Tobin's Q (e) R&D Expenses (f) Democratic Lean

Fig. 1. Distribution of key company characteristics variables

Source: own work.

Figure 1 illustrates the distribution of key company characteristics central to the study's analysis (mostly as control variables), using histograms for each attribute to highlight diversity across the sample. Each subplot reveals a different variable. Employee Size (Panel a) presents a right-skewed distribution, with most companies falling within a mid-range log size, indicating a concentration of mid-sized firms and fewer large entities. Company Age (Panel b) shows a wide range of ages, with density clusters among younger companies, suggesting the sample includes firms of varying maturity. Return on Assets (ROA) (Panel c) displays a balanced distribution around zero, emphasizing a mixed profitability profile across firms. Tobin's Q (Panel d) indicates high variance in market valuation relative to asset replacement, with a density peak below 5. Most companies in the sample exceeded the threshold of 1, indicating that their earnings were higher than the assets' replacement costs. R&D Expenses (Panel e) shows a skewed spread, with limited firms reporting very high R&D investments, highlighting variability in innovation focus. Democratic Lean of Headquarters State (Panel f) reveals the diverse political climates among the locations of the companies' headquarters over the years in the sample.

3.4. Analytical Phases

The study unfolds in three analytical phases, each aligning with the overarching theme of signaling in the context of LGBTQ+ inclusivity. Initially, a Univariate Analysis was conducted to scrutinize direct relationships between sector-specific metrics and inclusivity levels, as outlined in Table 1. This initial phase leveraged the extended dataset to explore direct relationships, setting the groundwork for subsequent in-depth analyses. This phase was particularly suited to examining how companies signal their inclusivity through sector-specific practices.

Following this, Instrumental Variables (IV) regression was applied to the econometric dataset to model the more nuanced interrelations among key variables with a focus on understanding how voluntary participation in the CEI report serves as a signal of a company's commitment to inclusivity. The regression is tailored to capture the essence of signaling through three variations: encompassing all observations, focusing solely on voluntary participation, and isolating mandatory participation scenarios. The IV model specifications are detailed in Table 2.

Table 2. IV Model specification

Variable Type	Details
Dependent variable	
CEI	the HRC's CEI
Endogenous variables	
Voluntary	1 if voluntarily in HRC report, 0 otherwise
Tobin's Q	Tobin's Q
Instruments	
LT_debt_to_assets	Long-Term Debt to Assets
RD_expenses	R&D Expenses
ROA	Return on Assets
Control variables	
ln_Employees	Natural Log of Employees (Firm Size)
Age	Company Age
time_trend	Time Trend
Democratic_Lean	Democratic Lean of HQ State
Variables of interest	
public_scrutiny	Public Scrutiny
consumer_proximity	Consumer Proximity
litigation_risk	Litigation Risk
injury_risk	Injury Risk

Source: own work.

In the IV analysis, two key endogenous variables are identified: 'Voluntary' participation in the HRC report and 'Tobin's Q'. 'Voluntary' is hypothesized to influence both the company's CEI and its decision to participate, reflecting an underlying commitment to inclusivity. 'Tobin's Q', indicative of a firm's market valuation relative to its asset replacement cost, was considered endogenous due to its links with management practices that also influence inclusivity efforts.

Instrumental variables, including long-term debt to assets ratio, R&D expenses, and Return on Assets (ROA), were selected for their strong correlation with the endogenous variables but presumed independence from the CEI (which was also confirmed in the data).

For the subsample analyses, 'Tobin's Q' was the sole endogenous variable, as 'Voluntary' held a consistent value within each subset.

Finally, the Structural Equation Modeling (SEM) system was designed to validate the findings from the IV regression and to elaborate on the complex web of incentives and pressures that drive corporate inclusivity signaling. As depicted in Figure 2, the system analyzes various incentives and pressures influencing inclusivity, particularly emphasizing the role of voluntary participation. A latent variable, 'Prone to Inclusivity', was posited, inferred from R&D expenses (similarly to the IV approach) and the Democratic Lean of the company's HQ state, which predicates a company's engagement in inclusivity efforts, impacting its CEI score and participation decision (an architecture not possible to achieve in the IV).

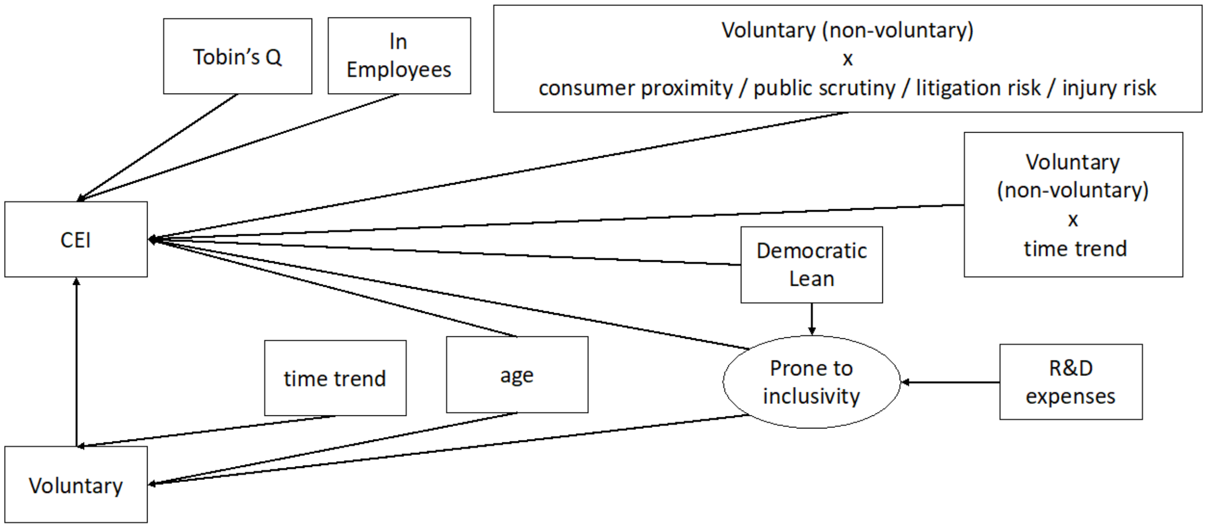


Fig. 2. Structural Equation Modeling system's architecture

Source: own work.

The latent variable is conceptually understood as representing a company's overarching stance towards inclusivity efforts. In cases where such efforts are absent, the company is likely neither inclined to participate in the report, nor positioned to achieve a high score. Conversely, a company signaling a greater willingness towards inclusivity might opt to engage with the report.

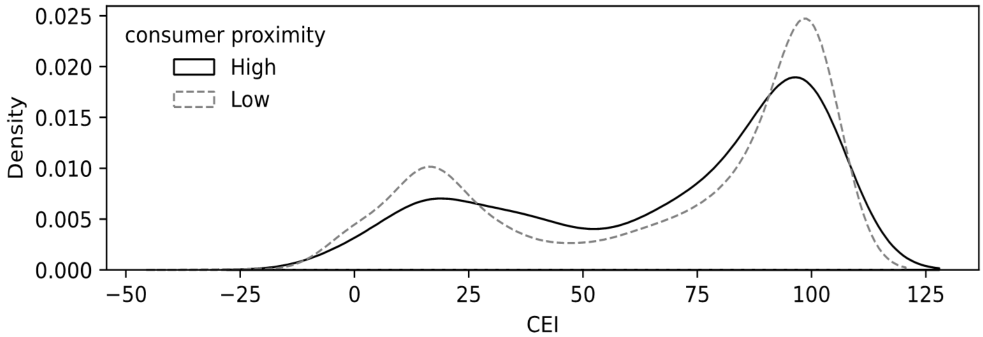
The SEM system was applied to the full dataset (i.e. for both levels of 'Voluntary' variable), introducing interaction variables to distinguish the effects of inclusivity drivers based on the company's willingness to participate. For clarity, they are represented by a sole rectangle in the architecture diagram. Due to the model's complexity, Tobin's Q's potential endogeneity was not incorporated, yet the framework remains insightful for hypothesis testing. All the variables were standardized to ensure model stability.

This analysis, grounded in the sector classification outlined in Table 1, examined the association between sector characteristics and the CEI scores as an indicator of inclusivity signaling.

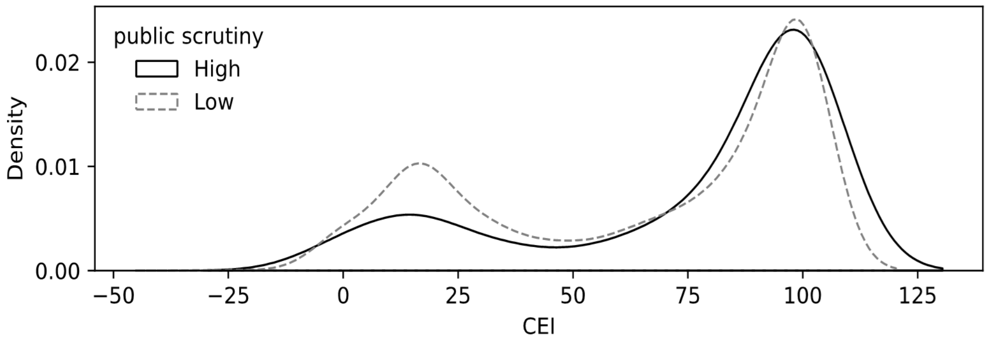
4. Results

4.1. Univariate Analysis

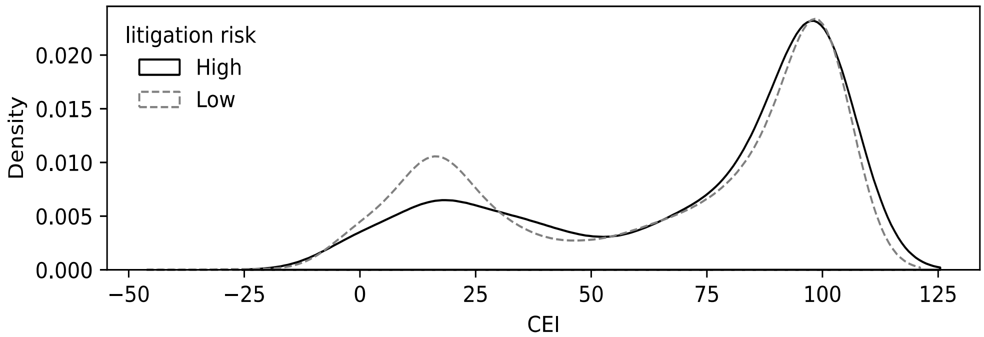
The data were analyzed in two ways — through a grouped Table 3 with CEI metrics, as well as through overlapping kernel density estimation (KDE) plots in Figure 3.



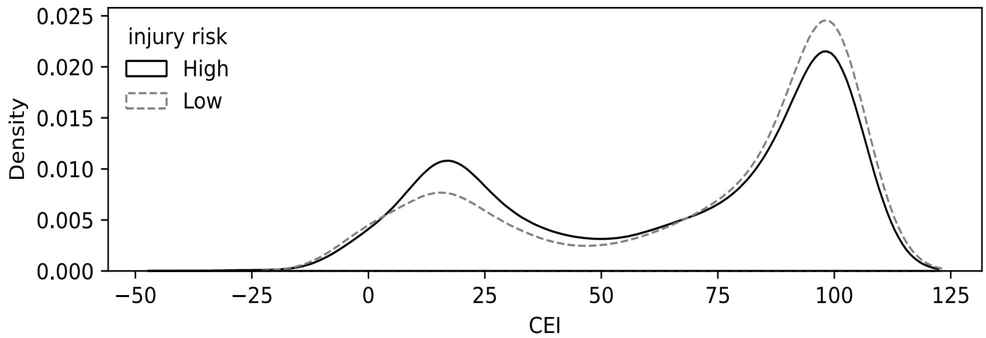
(a) Consumer Proximity



(b) Public Scrutiny



(c) Litigation Risk



(d) Injury Risk

Fig. 3. Distribution of CEI by binary variables

Source: own work.

Table 3. Overview of CEI in sectors in the full data

	Enterprises count	Mean CEI	Std of CEI	Share of voluntary obs.
Consumer proximity: High	80	68.44	33.50	0.78
Consumer proximity: Low	630	66.65	36.48	0.74
Public scrutiny: High	59	75.56	33.88	0.84
Public scrutiny: Low	651	66.06	36.23	0.73
Litigation risk: High	157	71.28	34.25	0.80
Litigation risk: Low	553	65.63	36.55	0.73
Injury risk: High	389	64.54	36.34	0.72
Injury risk: Low	321	69.98	35.62	0.77

Source: own work.

The examination of consumer proximity as a signaling mechanism (Hypothesis H1) revealed a nuanced relationship. Companies with high consumer proximity demonstrated a slightly elevated average CEI of 68.44, in contrast to their counterparts with a lower proximity, which had an average CEI of 66.65 (see Table 3). This marginal difference suggests that consumer-facing companies may leverage inclusivity as a signal to appeal to a broad consumer base. However, the overlapping distributions in the Kernel Density Estimation (KDE) plots in Figure 3 indicate a complex interplay of factors, with companies at both the lower and higher extremes of CEI predominantly featuring low consumer proximity. This complexity suggests that while consumer proximity plays a role in inclusivity signaling, it is intertwined with other determinants not captured in this univariate framework.

The data provide support for Hypothesis H2, suggesting that companies under high public scrutiny utilize inclusivity signaling more prominently, reflected in a higher mean CEI of 75.56 compared to 66.06 for those with lower scrutiny. The significant proportion of voluntary responses in high-scrutiny sectors further stressed a proactive approach to inclusivity signaling, aligning with the expectations of a broader stakeholder base. The KDE plots revealed a concentration of lower CEI scores among companies with less public scrutiny, indicating that heightened visibility may incentivize firms to signal their inclusivity efforts more robustly.

The analysis corresponding to Hypothesis H3 indicates that sectors with elevated litigation risks tend to signal their inclusivity efforts more distinctly, as evidenced by a higher average CEI of 71.28. This suggests that the potential for legal challenges acts as a driving force for companies to signal their commitment to inclusivity, aligning their practices with legal and ethical standards to mitigate risks.

Contrary to the anticipated outcome of Hypothesis H4, the data revealed an inverse relationship in sectors characterized by high injury risks, with a lower mean CEI of 64.54. This counterintuitive finding suggests that in sectors where operational safety is paramount, inclusivity signaling may not be prioritized to the same extent. The diverse CEI scores across exposure levels in the KDE plots for injury risk hint at a multifaceted dynamic, where safety concerns may overshadow inclusivity initiatives, or where inclusivity efforts are implemented in ways not directly captured by CEI scores.

The univariate analysis, through the lens of signaling theory, suggests the varied ways in which companies signal their inclusivity commitments based on sector-specific characteristics. While consumer proximity and public scrutiny emerge as potent signals for inclusivity efforts, the relationship with litigation and injury risks presents a more complex picture. This analysis highlights the importance of considering a multitude of factors in understanding how companies navigate inclusivity signaling, particularly in sectors where operational imperatives may intersect with social and ethical considerations.

As a supplement to this analysis, a comparison of mean CEI scores between voluntary and non-voluntary groups in the extended dataset revealed a substantial and statistically significant difference as presented in Table 4. Companies in the voluntary group had an average CEI score of 84.73, considerably higher than the mean score of 15.28 observed in the non-voluntary group. The independent *t*-test produced a *t*-statistic of 148.72 and a *p*-value of 0.0, indicating a highly significant difference in means. This result suggests that companies that voluntarily participate in LGBTQ+ inclusivity reporting tend to exhibit markedly higher levels of inclusivity compared to those that do not engage voluntarily. This finding further supports the use of the variable and the study, or even dividing the sample into separate IV models due to the large difference between the groups.

Table 4. Comparison of mean CEI between voluntary and non-voluntary Groups

	Voluntary	Non-voluntary
Mean CEI	84.73	15.28
Statistical test results		
t-statistic	148.72	
p-value	0.0	

Note: The difference in mean CEI between voluntary and non-voluntary groups is statistically significant (p < 0.05).

Source: own work.

4.2. Instrumental Variables Regression

Drawing from the regression results in Table 5 and substantiated by the hypotheses laid out in the study, a compelling understanding has emerged, particularly in the context of consumer proximity's role in inclusivity signaling.

Aligned with the signaling hypothesis H1, the analysis reveals a nuanced relationship between consumer proximity and inclusivity signaling, as indicated by CEI scores. The data suggested that firms with closer consumer interactions tend to signal higher inclusivity levels, potentially leveraging this as a strategic asset to resonate with a broad consumer base. However, the complexity of this relationship was highlighted by the marginal difference in average CEI scores between firms with high and low consumer proximity.

Table 5. IV Regression Results CEI (All Observations)

Coefficient	Estimate	*p*-value
(Intercept)	-36.65953	1.07e-09
Voluntary	92.02473	< 2e-16
ln_Employees	2.84950	5.87e-12
Age	-0.03592	0.1198
time_trend	0.56494	0.0061
Tobin's Q	1.75938	0.0820
Democratic_Lean	0.05827	0.1256
public_scrutiny	1.32056	0.5911
consumer_proximity	0.33277	0.9123
litigation_risk	1.25151	0.5590
injury_risk	1.29149	0.5023
Diagnostic tests		
Weak instruments (Voluntary)		5.65e-13
Weak instruments (Tobin's Q)		< 2e-16
Wu-Hausman		3.62e-05
Sargan		0.984

Source: own work.

Contrasting with the anticipated signaling effect, firms in high injury risk sectors exhibited a lower average CEI, suggesting that in environments where operational safety is paramount, inclusivity signaling may not be as pronounced. This finding challenges the initial hypothesis H4 and suggests that safety concerns might overshadow inclusivity initiatives in high-risk sectors, leading to a nuanced interpretation of signaling in these contexts.

These sector-specific results are in line with the initial conclusions drawn from the univariate analysis.

It also worth noting the positive effects of the states' democratic leanings, Tobin's Q, time trend and firm size in the model (all agreeing with the assumptions), and in particular, the vast importance of the voluntary participation alone is in inclusivity signaling. The significant impact of the 'Voluntary' variable on CEI scores stressed the importance of voluntary participation as a signaling mechanism. Businesses that opt to participate in the CEI study are likely signaling a proactive stance towards inclusivity, differentiating themselves in the market and among stakeholders. This voluntary disclosure serves as a deliberate signal, highlighting the firm's values and commitment to inclusivity. Surprisingly, firm age was not a significant factor in the analysis and its impact is inconclusive.

Table 6. Comparative IV regression results for CEI

Coefficient	Voluntary (1)		Non-voluntary (0)	
	Estimate	*p*-value	Estimate	*p*-value
(Intercept)	30.74794	2.42e-10	5.89957	0.35256
ln_Employees	3.95878	< 2e-16	-0.14818	0.77649
age	0.01489	0.2694	0.08491	9.26e-06
time_trend	1.21480	4.54e-12	0.09849	0.53680
Tobin's Q	3.43554	5.10e-05	1.20514	0.25302
Democratic_Lean	0.18233	7.13e-08	-0.02725	0.40607
public_scrutiny	-0.19905	0.9350	8.84210	0.00906
consumer_proximity	5.26940	0.0758	-17.32441	6.69e-05
litigation_risk	1.24160	0.5545	7.69976	0.02700
injury_risk	-3.12536	0.0460	8.20711	0.00252
Diagnostic tests				
Weak instruments	<2e-16		< 2e-16	
Wu-Hausman	0.0356		0.08491	
Sargan	0.1612		0.00538	

Source: own work.

The comparative regression analysis (Table 6) between voluntary and non-voluntary participants revealed divergent signaling mechanisms, suggested not only through differences in the regression results, but also the model specification itself. Regarding observations where firms did not express a willingness to participate in the CEI study, the Sargan diagnostic test indicated a misspecification of the model. Companies not engaging voluntarily in the CEI study presented a distinct model, with a lack of significant correlations suggesting that external pressures for inclusivity, if not internally sanctioned, may have a limited impact on these firms. This segment of the market, seemingly resistant to unsanctioned societal pressures for inclusivity, reflects the complex landscape of inclusivity signaling and the critical role of internal commitment in these efforts.

4.3. Structural Equation Modeling

The Structural Equation Modeling (SEM) results, as outlined in Table 7, offer insightful revelations about the dynamics underpinning corporate inclusivity signaling.

Table 7. SEM model results for CEI

Path	Coefficient	Std. Err.	*p*-value	95% conf. interval
Path: CEI Standardized				
Democratic Lean Std.	0.0704	0.0126	<0.001	[0.0457, 0.0951]
Tobin's Q Std.	0.0767	0.0124	<0.001	[0.0525, 0.1010]
Ln Employees Std.	0.1010	0.0132	<0.001	[0.0753, 0.1268]
Vol x Time Trend	0.1256	0.0133	<0.001	[0.0995, 0.1516]
Non-Vol x Time Trend	0.0030	0.0267	0.910	[-0.0493, 0.0553]
Age Std.	0.0215	0.0123	0.080	[-0.0026, 0.0457]
Voluntary	2.2777	0.1419	<0.001	[1.9996, 2.5558]
Vol x Consumer Proximity	0.1510	0.0792	0.056	[-0.0042, 0.3062]
Non-Vol x Consumer Proximity	-0.5326	0.2191	0.015	[-0.9620, -0.1032]
Vol x Injury Risk	-0.1086	0.0415	0.009	[-0.1899, -0.0273]
Non-Vol x Injury Risk	0.3137	0.1396	0.025	[0.0402, 0.5873]
Vol x Public Scrutiny	0.0140	0.0650	0.829	[-0.1133, 0.1413]
Non-Vol x Public Scrutiny	0.2720	0.1752	0.120	[-0.0713, 0.6153]
Vol x Litigation Risk	0.0089	0.0549	0.871	[-0.0987, 0.1165]
Non-Vol x Litigation Risk	0.1570	0.1716	0.360	[-0.1794, 0.4934]
Prone to Inclusivity	0.0334	0.0125	0.008	[0.0088, 0.0579]
_cons	-1.8313	0.1364	<0.001	[-2.0988, -1.5639]
Path: Voluntary				
Time Trend Std.	0.2716	0.0338	0.000	[0.2053, 0.3379]
Age Std.	0.2875	0.0385	0.000	[0.2120, 0.3630]
Path: Prone to Inclusivity				
R&D Expenses Std.	1.1082	0.1514	0.000	[0.8115, 1.4049]
Democratic Lean Std.	0.1808	0.0334	0.000	[0.1153, 0.2463]

Source: own work.

The SEM results indicate that both the political leaning of a company's headquarters (Democratic Lean Std.) and its financial performance (TobinsQ Std.), significantly contributed to its CEI, reinforcing the notion that firms in politically progressive regions and those with robust financial health are more likely to signal inclusivity. This is consistent with the idea that companies leverage these characteristics to communicate their commitment to inclusive values to stakeholders.

Larger companies (Ln Employees Std.) were shown to have a positive association with CEI, suggesting that their visibility and resources enable them to more effectively signal inclusivity. This aligns with the premise that sizeable entities have the means and the platform to champion inclusivity initiatives more prominently. Similarly to model IV, company age did not achieve a definite result given the negative values and zero in the 95% in the confidence interval, suggesting that the capacity for inclusivity signaling is not solely dependent on a firm's longevity but rather its strategic orientation and internal culture.

A pivotal finding from the SEM analysis was the significant positive coefficient for 'Voluntary', stressing the critical role of voluntary participation in inclusivity reporting as a clear signal of a firm's dedication to LGBTQIA+ inclusivity. This confirms the hypothesis that firms voluntarily engaging in inclusivity efforts are not only complying with external expectations, but are also internally motivated to promote inclusivity, thus sending a potent signal to the market and stakeholders about their values and corporate ethos.

The interaction term ’Vol x Time Trend’ highlights the evolving nature of inclusivity signaling, indicating that the impact of voluntary participation on CEI has grown over time, reflecting a maturing approach to inclusivity among proactive firms. For non-voluntary participants (’Non-Vol x Time Trend’), the impact on CEI was negligible, reinforcing the notion that mere compliance without genuine engagement does not translate into substantial inclusivity efforts.

The interaction of voluntary participation with consumer proximity (’Vol x Consumer Proximity’) suggests that firms in consumer-facing sectors further amplify their inclusivity signaling when they choose to participate voluntarily, leveraging their close consumer interactions to enhance their inclusivity profile. Conversely, ’Non-Vol x Consumer Proximity’ showed a significant negative association, indicating that without voluntary participation, consumer proximity might not foster inclusivity, or the clients of these firms may actually exert pressures contrary to those experienced by the voluntarily participating firms with high consumer proximity. This confirms Hypothesis 1.

The results once again indicated a negative relationship between ‘Vol x Injury Risk’ and CEI, implying that voluntary participants in high injury risk sectors might face challenges in balancing safety concerns with inclusivity (contrary to Hypothesis 2). For non-voluntary participants (‘Non-Vol x Injury Risk’), this trend was the opposite, hinting at distinct operational factors in such companies. This difference may stem from the indirect effects of fundamental safety measures on inclusivity aspects, such as medical services availability, which are not typically addressed in lower-inclusivity companies that do not prioritize security in their operations.

Similarly to the previous two frameworks, i.e., univariate analysis and IV model, Hypothesis 2 and Hypothesis 3 concerning public scrutiny and litigation risk, were not confirmed in this approach.

The ’Prone to Inclusivity’ latent variable, informed by R&D expenses and Democratic Lean, showcased a significant positive effect on CEI, emphasizing that a firm’s inherent predisposition towards inclusivity is a fundamental driver of its signaling efforts. This latent variable reflects the essence of a firm’s internal culture and values, illustrating how deeply ingrained commitments to inclusivity can influence external signaling.

Overall, the SEM results complement and enrich the understanding gained from the univariate analysis and IV regression. The analysis revealed that voluntary participation, supported by firm-specific characteristics and shaped by sector-specific dynamics, plays a crucial role in how firms communicate their commitment to inclusivity. The distinction between voluntary and non-voluntary participation underlines the significance of genuine engagement in inclusivity efforts, suggesting that true commitment to inclusivity transcends mere compliance, becoming a strategic and value-driven aspect of corporate identity.

5. Discussion and Conclusions

This research on the interplay between sector characteristics, voluntary participation, and LGBTQ+ inclusivity in U.S. corporations, anchored by the Corporate Equality Index, sheds light on the multifaceted nature of corporate inclusivity efforts. The study’s methodology, combining univariate analysis, IV regression, and SEM, reveals significant patterns and associations that show the understanding of inclusivity within the corporate sphere.

The clear association between consumer proximity and enhanced inclusivity levels, particularly pronounced in firms that voluntarily engage in inclusivity reporting, illustrates the strategic significance of inclusivity as a signaling mechanism to align with consumer values and expectations. This alignment, underpinned by signaling theory, suggests that inclusivity efforts serve as a crucial communication tool for firms to articulate their values and commitments to a broader audience.

Conversely, the nuanced findings in sectors with high injury risks highlight the potential for operational and safety priorities to dilute the focus on inclusivity initiatives. This emphasizes the importance of adopting a holistic approach that accommodates both operational exigencies and inclusivity goals.

The study's insights into the differential impact of voluntary versus non-voluntary participation in inclusivity efforts indicates the pivotal role of internal motivation in the effectiveness of these initiatives. Firms with a genuine commitment to inclusivity, as demonstrated by their voluntary engagement in reporting, are better positioned to utilize these efforts to bolster their corporate image and stakeholder relations effectively.

This study reveals the intricate dynamics of LGBTQ+ inclusivity within corporate frameworks, emphasizing the pivotal role of signaling theory in understanding how firms communicate their inclusivity efforts to stakeholders. The findings highlight how consumer proximity acts as a significant driver for companies to signal their commitment to inclusivity, aligning with market expectations and leveraging inclusivity as a strategic asset. This suggests that inclusivity is not merely an internal policy, but a response to external market signals where consumer preferences exert a substantial influence on corporate behavior.

For scholars, this research enriches the application of signaling theory in the context of corporate social responsibility, specifically in the realm of LGBTQ+ inclusivity.

The study encourages further exploration into how firms use inclusivity as a signal to various stakeholders, including consumers, employees, and investors. For practitioners, especially within HR and CSR domains, these insights underlines the importance of aligning inclusivity efforts with broader market and societal trends, ensuring that such initiatives resonate authentically with external expectations.

The study also points to the nuanced effect of voluntary participation in inclusivity efforts, suggesting a complex interplay between firms' internal motivations and the efficacy of their signaling. The variability in the effectiveness of inclusivity signaling opens up several avenues for further research. Investigating the barriers to inclusivity within these organizations could provide a blueprint for transformative strategies that encourage a more inclusive corporate culture. Additionally, examining the ripple effects of comprehensive legal frameworks on inclusivity policies could offer a deeper understanding of the symbiotic relationship between regulatory environments and corporate practices.

A broader, more diversified research encompassing various industries and geographic locations could examine the global landscape of corporate inclusivity, revealing cultural and regulatory nuances. Longitudinal studies examining the impact of inclusivity on aspects such as corporate performance, employee engagement, and brand loyalty would further enrich the discourse, providing a more holistic view of the value of inclusivity initiatives.

In conclusion, this research offers a comprehensive exploration of the dynamics influencing corporate inclusivity efforts among large U.S.-based corporations, highlighting the interplay between internal motivations, sector-specific pressures, and the strategic use of inclusivity as a signaling mechanism. These findings contribute to the broader discourse on corporate social responsibility and inclusivity, providing a foundation for future research and strategic insights for firms aiming to enhance their inclusivity practices amidst an evolving societal and market landscape.

References

Aguinis, H., & Glavas, A. (2012). What We Know and Don't Know about Corporate Social Responsibility: A Review and Research Agenda. *Journal of Management, 38*(4), 932-968. https://doi.org/10.1177/0149206311436079

Bae, S. M., Masud, M. A. K., & Kim, J. D. (2018). A Cross-country Investigation of Corporate Governance and Corporate Sustainability Disclosure: A Signaling Theory Perspective. *Sustainability, 10*(8), 2611. https://doi.org/10.3390/su10082611

Branco, M. C., & Rodrigues, L. L. (2008). Factors Influencing Social Responsibility Disclosure by Portuguese Companies. *Journal of Business Ethics, 83*, 685-701. https://doi.org/10.1007/s10551-007-9658-z

Černič, J. L. (2010). *Human Rights Law and Business: Corporate Responsibility for Fundamental Human Rights*. Europa Law Publishing. https://doi.org/10.1093/hrlr/ngr006

Choi, S.-j., Shin, J., Kuper, P., & Zhang, L.-Y. (2023). Corporate Decisions on LGBT Friendliness: A Multi-level Approach. *Management Decision, 61*(4), 996-1012. https://doi.org/10.1108/MD-08-2022-1055

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management, 37*(1), 3967. https://doi.org/10.1177/0149206310388419

Cowen, S. S., Ferreri, L. B., & Parker, L. D. (1987). The Impact of Corporate Characteristics on Social Responsibility Disclosure: A Typology and Frequency-based Analysis. *Accounting, Organizations and Society, 12*(2), 111-122. https://doi.org/10.1016/0361-3682(87)90001-8

Deloitte. (2023). *The Deloitte Global 2023 LGBT+ Inclusion @ Work Report*. https://www2.deloitte.com/content/dam/Deloitte/sk/Documents/human-capital/deloitte-global-2023-lgbt-inclusion-at-work%20FINAL%20(1).pdf

Dhaliwal, D., Li, O. Z., Tsang, A., & Yang, Y. G. (2014). Corporate Social Responsibility Disclosure and the Cost of Equity Capital: The Roles of Stakeholder Orientation and Financial Transparency. *Journal of Accounting and Public Policy, 33*(4), 328-355. https://doi.org/10.1016/j.jaccpubpol.2014.04.006

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication. *International Journal of Management Reviews, 12*(1), 8-19. https://doi.org/10.1111/j.1468-2370.2009.00276.x

Everly, B. A., & Schwarz, J. L. (2015). Predictors of the Adoption of LGBT-friendly HR Policies. *Human Resource Management, 54*(2), 367-384. https://doi.org/10.1002/hrm.21622

Fatmy, V., Kihn, J., Sihvonen, J., & Vähämaa, S. (2022). Does Lesbian and Gay Friendliness Pay Off? A New Look at LGBT Policies and Firm Performance. *Accounting & Finance, 62*(1), 213-242. https://doi.org/10.1111/acfi.12787

Garriga, E., & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics, 53*(1), 51-71. https://doi.org/10.1023/B:BUSI.0000039399.90587.34

Gerber, P., & Gory, J. (2014). The UN Human Rights Committee and LGBT Rights: What Is It doing? What Could It Be Doing? *Human Rights Law Review, 14*(3), 403-439. https://doi.org/10.1093/hrlr/ngu019

González, T. A., Calluzzo, P., Dong, G. N., & Granic, G. D. (2022). Determinants of LGBTQ+ Corporate Policies. *The Review of Corporate Finance Studies, 11*(3), 644-693. https://doi.org/10.1093/rcfs/cfac014

Grougiou, V., Dedoulis, E., & Leventis, S. (2016). Corporate Social Responsibility Reporting and Organizational Stigma: The Case of 'Sin' Industries. *Journal of Business Research, 69*(2), 905-914. https://doi.org/10.1016/j.jbusres.2015.06.041

Hetze, K. (2016). Effects on the (CSR) Reputation: CSR Reporting Discussed in Light of the Signaling and Stakeholder Perception Theories. *Corporate Reputation Review, 19*, 281-296. https://doi.org/10.1057/s41299-016-0002-3

Hossain, M., Atif, M., Ahmed, A., & Mia, L. (2020). Do LGBT Workplace Diversity Policies Create Value for Firms? *Journal of Business Ethics, 167*, 775-791. https://doi.org/10.1007/s10551-019-04158-z

Human Rights Campaign Foundation. (2023a). *Corporate Equality Index*. Human Rights Campaign Foundation.

Human Rights Campaign Foundation. (2023b). *Corporate Equality Index 2023*. Human Rights Campaign Foundation.

Hwang, C. G., Lee, Y.-A., & Diddi, S. (2015). Generation Y's Moral Obligation and Purchase Intentions for Organic, Fair-trade, and Recycled Apparel Products. *International Journal of Fashion Design, Technology and Education, 8*(2), 97-107. https://doi.org/10.1080/17543266.2014.996917

Langlois, A. J. (2020). *Making LGBT Rights into Human Rights*. Oxford University Press.

Lopatta, K., Tideman, S. A., Scheil, C., & Makarem, N. (2022). The Current State of Corporate Human Rights Disclosure of the Global Top 500 Business Enterprises: Measurement and Determinants. *Critical Perspectives on Accounting*, 102512. https://doi.org/10.1016/j.cpa.2022.102512

Mahoney, L. S., Thorne, L., Cecil, L., & LaGore, W. (2013). A Research Note on Standalone Corporate Social Responsibility Reports: Signaling or Greenwashing? *Critical Perspectives on Accounting, 24*(4-5), 350-359. https://doi.org/10.1016/j.cpa.2012.09.008

Office of the United Nations High Commissioner for Human Rights. (2023). *UN Free & Equal Global Campaign to Promote Equal Rights for LGBTI People*. https://www.ohchr.org/en/sexual-orientation-and-gender-identity/un-free-equal-global-campaign-promote-equal-rights-lgbti-people

Palthe, J. (2014). Regulative, Normative, and Cognitive Elements of Organizations: Implications for Managing Change. *Management and Organizational Studies, 1*(2), 59-66. https://doi.org/10.5430/mos.v1n2p59

Pichler, S., Blazovich, J. L., Cook, K. A., Huston, J. M., & Strawser, W. R. (2018). Do LGBT-supportive Corporate Policies Enhance Firm Performance? *Human Resource Management, 57*(1), 263-278. https://doi.org/10.1002/hrm.21831

Schrempf-Stirling, J., & Wettstein, F. (2017). Beyond Guilty Verdicts: Human Rights Litigation and its Impact on Corporations' Human Rights Policies. *Journal of Business Ethics, 145*, 545-562. https://doi.org/10.1007/s10551-015-2889-5

Scott, W. R. (2013). *Institutions and Organizations: Ideas, Interests, and Identities*. Sage publications. https://doi.org/10.3917/mana.172.0136

Servaes, H., & Tamayo, A. (2013). The Impact of Corporate Social Responsibility on Firm Value: The Role of Customer Awareness. *Management Science, 59*(5), 1045-1061. https://doi.org/10.1287/mnsc.1120.1630

Shan, L., Fu, S., & Zheng, L. (2017). Corporate Sexual Equality and Firm Performance. *Strategic Management Journal, 38*(9), 1812-1826. https://doi.org/10.1002/smj.2624

Spence, M. (1978). Job Market Signaling. In P. Diamond, & M. Rothschild (Eds.) *Uncertainty in Economics* (pp. 281-306). Academic Press. https://doi.org/10.1016/B978-0-12-214850-7.50025-5

Su, W., Peng, M. W., Tan, W., & Cheung, Y.-L. (2016). The Signaling Effect of Corporate Social Responsibility in Emerging Economies. *Journal of Business Ethics, 134*, 479-491. https://doi.org/10.1007/s10551-014-2404-4

Torugsa, N. A., O'Donohue, W., & Hecker, R. (2013). Proactive CSR: An Empirical Analysis of the Role of its Economic, Social and Environmental Dimensions on the Association Between Capabilities and Performance. *Journal of Business Ethics, 115*, 383-402. https://doi.org/10.1007/s10551-012-1405-4

Udayasankar, K. (2008). Corporate Social Responsibility and Firm Size. *Journal of Business Ethics, 83*(2), 167-175. https://doi.org/10.1007/s10551-007-9609-8

U.S. Chamber of Commerce Foundation. (2023). *Better Business: The Benefits of LGBTQ+ Inclusion in the Workplace*. https://www.uschamberfoundation.org

Van Beurden, P., & Gössling, T. (2008). The Worth of Values: A Literature Review on the Relation Between Corporate Social and Financial Performance. *Journal of Business Ethics, 82*, 407-424. https://doi.org/10.1007/s10551-008-9894-x

Withisuphakorn, P., & Jiraporn, P. (2016). The Effect of Firm Maturity on Corporate Social Responsibility (CSR): Do Older Firms Invest More in CSR? *Applied Economics Letters, 23*(4), 298-301. https://doi.org/10.1080/13504851.2015.1071464

WorkCover Queensland. (2014). *High Risk Industries*. https://www.worksafe.qld.gov.au/laws-and-compliance/workers-compensation-laws/guidance-materials/high-risk-industries

Xu, D., & Shenkar, O. (2002). Note: Institutional Distance and the Multinational Enterprise. *Academy of Management Review, 27*(4), 608-618. https://www.jstor.org/stable/4134406

Zerbini, F. (2017). CSR Initiatives as Market Signals: A Review and Research Agenda. *Journal of Business Ethics, 146*(1), 1-23. https://doi.org/10.1007/s10551-015-2922-8

Zhou, A. (2021). Communicating Corporate LGBTQ Advocacy: A Computational Comparison of the Global CSR Discourse. *Public Relations Review, 47*(4), 102061. https://doi.org/10.1016/j.pubrev.2021.102061

Sygnalizowanie inkluzywności: Determinanty inkluzywności korporacyjnej wobec osób LGBTQIA+ w ramach teorii sygnalizacji

Streszczenie

Cel: Celem artykułu jest zrozumienie, w jaki sposób amerykańskie korporacje sygnalizują swoje zaangażowanie na rzecz inkluzywności wobec osób LGBTQ+. Jako ramy badawcze wykorzystano teorię sygnalizacji. Na podstawie analizy zbioru danych z 700 firm oraz wykorzystania Indeksu Równości Korporacyjnej (Corporate Equality Index, CEI), opracowanego przez Human Rights Campaign, wskazano rolę cech sektorowych oraz dobrowolnego uczestnictwa w działaniach na rzecz inkluzywności.

Metodyka: Analiza jednej zmiennej, regresja z użyciem zmiennych instrumentalnych (IV), modelowanie równań strukturalnych (SEM).

Wyniki: W artykule pokazano, że firmy z sektorów skierowanych do konsumentów sygnalizują silniejsze zaangażowanie w inkluzywność, co znajduje odzwierciedlenie w wyższych wynikach CEI, podczas gdy sektory o wysokim ryzyku wypadków charakteryzują się słabszą lub odwrotną korelacją z poziomem inkluzywności. Dodatkowo wyniki badania podkreślają znaczenie autentyczności działań na rzecz inkluzywności – szczególnie dobrowolności raportowania – sugerując, że rzeczywiste zaangażowanie, a nie tylko spełnianie wymogów, ma kluczowe znaczenie dla skuteczności sygnalizowania inkluzywności.

Implikacje i rekomendacje: Implikacje dla badaczy obejmują głębsze zrozumienie wpływu dynamiki sektorów oraz dobrowolności działań na inkluzywność korporacyjną, podczas gdy dla praktyków wyniki sugerują, aby priorytetowo traktować autentyczne zaangażowanie w celu efektywnego komunikowania wartości inkluzywności interesariuszom.

Oryginalność/wartość: W badaniu podkreślono znaczenie autentycznego sygnalizowania inkluzywności w kształtowaniu kultury korporacyjnej i postrzegania firmy na zewnątrz.

Słowa kluczowe: Indeks Równości Korporacyjnej, teoria sygnalizacji, korporacyjne polityki inkluzywności, CSR