Title
The Past and Future of Corporate Sustainability Research

Authors
Burbano, Vanessa
Delmas, Magali A
Cobo, Manuel Jesus

Publication Date
2022-10-03

Peer reviewed

THE PAST AND FUTURE OF CORPORATE SUSTAINABILITY RESEARCH

Vanessa C. Burbano, Magali A. Delmas, and Manuel Jesus Cobo[1]

Forthcoming *Organization & Environment*

ABSTRACT

Despite the skyrocketing of corporate sustainability research in management, environmental grand challenges like climate change, persist. Given firms' pivotal role in either improving or worsening these challenges, it is important to consider how corporate sustainability research can impact the resolution of these challenges. Understanding the historical evolution of the cognitive structure of the field facilitates the forecasting of the likely future path of sustainability research. Through the analysis of the co-occurrence of 25,701 keywords in 11,954 sustainability-related articles from 1994-2021, we identify and graphically illustrate how ideas in the field have been interconnected, evolved, and are trending. Unexpectedly, we observe that the environmental focus in the literature wanes despite heightened environmental salience. We suggest ways that the trajectory of sustainability research should change to improve our ability to help businesses address environmental challenges. These include reassessing the problem focus, recalibrating theoretical foundations, and reimagining methodologies.

Keywords: corporate sustainability, systematic review, research impact, science mapping

Acknowledgment: The authors would like to thank Oheneba Ama Nti Osei and Terry Sun for their excellent research assistance with this project.

[1] Vanessa C. Burbano, Columbia Business School, Vanessa.burbano@gsb.columbia.edu; Magali A. Delmas, UCLA, delmas@ioes.ucla.edu; University of Granada, Manuel Jesus Cobo, mjcobo@decsai.ugr.es

INTRODUCTION

The topic of corporate sustainability—"the inclusion of social and environmental concerns in business operations and in interactions with stakeholders" (Dyllick & Hockerts, 2002, p. 131) — has become an increasingly prevalent focus in management research. Business management researchers have published about twelve thousand articles on corporate sustainability issues, with these accelerating in the last ten years. Yet environmental grand challenges, such as climate change, have worsened (Lyon et al., 2018). The intricate interplay between anthropogenic activities and their environmental repercussions is significantly driven by the operations of firms (Hoffman & Jennings, 2015). The actions of firms influence the degree to which climate change issues worsen; and they also have the potential to catalyze transformative solutions to these challenges. Given the potential of the business sector to either exacerbate or improve these existential environmental threats, how can we structure future corporate sustainability research to help tackle these challenges? Understanding the historical evolution of the cognitive structure of the field facilitates the forecasting or prediction of the likely future path of sustainability research. With this understanding, we can make recommendations as to how this path could be altered to improve our capacity as a field to address "wicked" environmental and societal problems such as climate change (Henriques, 2018). Specifically, we ask: How has the underlying cognitive structure of the field of corporate sustainability evolved in business management research, and how do these cognitive shifts affect our collective ability to effectively address the web environmental challenges that society faces today?

A number of reviews have been conducted to describe and define facets of the field and identify research areas within it. For example, scholars have reviewed definitions and measurements of corporate social responsibility (CSR) (Carroll, 1999; Dahlsrud, 2008; Meuer et al., 2020) and corporate sustainability (Barnett, et al., 2020; Montiel & Delgado-Ceballos, 2014), theories of CSR (Garriga &

Melé, 2004), the relationship between environmental management research and other research areas (Etzion, 2007; Bansal & Hoffman, 2012), and the relationship between CSR predictors and outcomes (Aguinis & Glavas, 2012). Researchers have also conducted bibliometric analyses on the topics of business and the environment (Hoffman & Georg, 2012); corporate responsibility (Barnett et al., 2020; Brammer et al., 2022), climate change (Nyberg et al., 2022), green supply chain management (Fahimnia et al., 2015), and social entrepreneurship (Vedula et al., 2021). However, these reviews have a priori focused on one or two particular facets of sustainability rather than empirically observing the relative importance of a facet relative to other (potential) facets. While providing a deep dive into one or two key concepts in sustainability research, these reviews have not yet provided a comprehensive overview of how the different concepts and ideas are interconnected with each other. Furthermore, extant reviews have often focused on snapshots of (relatively short) periods, rather than exploring changes over time (as noted in Bansal and Song, 2017).

Our paper addresses the need for a comprehensive overview of how ideas in the field are interconnected and have evolved over time by reviewing the evolution of the underlying cognitive structure of the field. We examine the evolution of the shared conceptual system of corporate sustainability in business research as expressed through the terminology used in publications. We apply science mapping techniques, which enable visualization and examination of how terms that represent different research topics, concepts, and ideas are interconnected and evolve, thereby revealing the evolution and likely future path of the underlying cognitive structure of a field (Moral-Muñoz et al. 2019). Given this arc, we suggest ways that the trajectory of sustainability research should change in order to improve our ability to help address environmental challenges as a field.

Specifically, we compile a dataset of sustainability-oriented business articles and then employ the science-mapping methodology to identify and map the evolution of key concepts over time. By

analyzing the co-occurrence of 25,701 keywords in 11,954 sustainability-related articles from 1994 to 2021, we first identify, graphically illustrate, and quantitatively analyze the emergence and evolution (as well as relative importance) of the terminology and concepts used in the sustainability field over time, as well as the relationships between them (Montero-Diaz et al, 2018). In pursuit of a deeper understanding of the evolution of key components of the research which has contributed to the ideas most central to the field over time, we next analyze the most influential articles underlying the central concepts and terms used in the field. We categorize these contributions along the following dimensions: the dependent variable studied, the unit of analysis, the academic disciplines involved, the ESG factor of focus, and the methods used. We thus examine the evolution and trajectory of *what we study* (dependent variables, problem focus, and unit of analysis), *how we think about what we study* (theoretical bases), *who studies it* (disciplines), and *how we study it* (methodology).

Our review uncovers a noteworthy trend. Initially centered on the environment and oriented towards environmental solution-seeking, business sustainability research has transitioned to encompass a wider spectrum of interests, including social and governance concerns. Regrettably, there has been a limited focus on quantifying the genuine environmental effects of firms on society. This shift comes with a potential trade-off, possibly impeding the development of practical solutions and reducing research precision. Without a more meticulous measurement of a firm's environmental impact, the evaluation of progress becomes a challenging endeavor. Moreover, the historical arc of corporate sustainability research suggests that it is becoming disconnected from pressing environmental issues. In terms of utilized theories, the resource-based view of the firm has become prevalent, focusing on the business justification for sustainability. Yet this perspective will likely fall short in helping businesses effectively address climate change. Notably absent in central business research are theories addressing growth dynamics or the tragedy of the commons, concepts developed in other disciplines to address

sustainable problems. This segmented research approach inhibits interdisciplinary cooperation, limiting the development of comprehensive, holistic solutions. The incorporation of insights from political science, engineering, and the natural sciences into management sustainability research will become pivotal for informing business decision-making towards addressing environmental grand challenges and combatting greenwashing.

The trajectory of focusing on firms as the main unit of analysis is also a potential limitation, as addressing complex global sustainability issues won't be possible by focusing on firms alone. This will require multi-level analyses and systems thinking. The use of secondary data in quantitative analyses poses a problem as well, in that it is disconnected from actual firm practices, making the translation of results from such analyses into actual firm choices difficult. Given this, we encourage a paradigm shift towards increased inclusion of experimentation and collaborative creation alongside practitioners.

In conclusion, our analysis of the evolution and trajectory of the field shows that corporate sustainability research will require a substantial transformation in the future if our goal includes effectively addressing climate change and environmental sustainability concerns. Reassessing the unit of analysis, recalibrating theoretical foundations, and reimagining methodologies will be essential for the business field to make meaningful contributions to global sustainable solutions.

METHODS

To analyze the evolution and trajectory of the cognitive structure of the field (Cobo et al., 2012), we adopt the view that a field exists through a medium of ordered language that constrains the space of its representations (Foucault 1994). The terminology used provides the means to share points of view and thus, reflects the cognitive structure of a field (Jacob 1994). Science mapping analyzes this terminology to "determine [a field's] cognitive structure and…evolution." We took the following steps.

1. Determination of query terms of focus and identification of initial corpus of articles. We first retrieved a set of documents to define the research field (the initial data corpus) based on a set of query terms. We asked the leadership of the Organization and the Natural Environment (ONE) and Social Issues in Management (SIM) groups of the Academy of Management, as well as the Business & Society Journal, to provide us with the list of keywords they use to identify articles as relevant to their topics of focus.[2] To cull keywords from this combined list, we then asked scholars in the field to indicate the degree to which each potential keyword would identify articles related to the field of corporate sustainability (using a 5-point Likert Scale), via the ONE and SIM group listservs from the Academy of Management, as well as the Alliance for Research on Corporate Sustainability (ARCS) listserv. See Appendix 1a for the exact Survey instructions and details, and Appendix 1b for the 136 query terms (and their derivations) identified as a result.

We retrieved all published articles in the "Business" category of the Web of Science (WoS) database which contained any of these query terms in the article's title, abstract, or keywords (keywords are those identified by the author of an article, as well as those assigned to an article by the WoS' ISI's KeyWords Plus tool). The retrieved articles were published between 1973 and 2021. As is common with scientometric studies, the set of chosen journals and keywords serves, to some extent, as a proxy for the field. That is, we make an implicit assumption that these journals and keywords are representative of the cognitive output of the field.

2. Determination of the final corpus of articles and keyword pre-processing. Our main analysis leverages an open-source Science Mapping Analysis Software Tool (*SciMAT*) (Cobo et al., 2011,

[2] The list was compiled in 2015. However, a comparison of the initial list and the 2023 list from ONE (obtained in August 2023) suggests that these lists have not changed very much.

2012) and is based on the article's keywords. Given that publications between 1973 and 1993 did not contain any keywords, we excluded these earlier years from our database.[3] Given that the word "sustainability" could identify articles relevant to our focus but also identify articles outside our area of focus such as those examining the sustainability of competitive advantage, two groups of research assistants (RAs) independently conducted a manual review of all articles identified by the word "sustainability" to remove documents that did not fit with the research field under study.[4] At the end of this process, a total of 11,954 documents published between 1994 and 2021 remained in the dataset (see Appendix 2 for a visual of the steps in culling the articles of focus). The final corpus was divided into five consecutive periods, which were selected to ensure enough documents per period for effective analysis and to examine enough periods to facilitate the examination of changes over time.[5] These were 1994-2003, 2004-2008, 2009-2013, 2014-2017, and 2018-2021, with 971, 1008, 2619, 2870, and 4485 publications, respectively (see Appendix 3). Keywords in the final corpus were then preprocessed (e.g., "CSR" and "corporate social responsibility" are combined).

3. Detection of themes and research impact analysis. A process was carried out to detect the field's themes based on article keywords. This co-words bibliographic network analysis enables a conceptual representation of the concepts covered in a network (Callon et al., 1983). A co-words network is a network based on keyword co-occurrence, where the nodes are the keywords and the arcs

[3] As the field of sustainability is relatively new (e.g., the Organizations and the Natural Environment, or ONE, group of the Academy of Management was formed in 1995), exclusion of these early years from our database does not seem problematic.
[4] In cases where the RAs' assessments differed, the authors agreed on whether to include or exclude the article in question.
[5] Periods are delineated based on two considerations, typical of the SciMat methodology: to ensure 1) each period includes enough documents for the analysis, and 2) that there are enough periods for a relevant comparison over time (Molina-Collado et al., 2022; López-Ricardo et al. 2019). Thus, the first period includes 10 years to ensure enough documents for analysis in a given period. The next two periods are 5 years each. The last period is just 4 years, given when we conducted the analysis (2021 was the last full year of data available at the time we pulled the articles from WoS). Our periods also coincide with important dates in the field of sustainability. For example, Organizations and the Natural Environment (ONE) was added as a division of the Academy of Management (AoM) in 1995; the Group for Research on Organizations and the Natural Environment was created in 2003; the Alliance for Research in Corporate Sustainability was created in 2009.

among them represent a co-occurrence relationship. Specifically, the co-occurrence frequency of two keywords is extracted from the corpus by counting the number of documents in which they appear together. This relationship is weighted by considering the number of documents where the keywords co-appear (i.e. raw co-occurrence frequency) and normalizing it using the equivalence index measure (a measure computed based on the frequency and co-occurrence of words; see Cobo et al., 2011). Finally, a clustering algorithm is applied to divide the whole network into topics or themes (i.e. groups of keywords with a strong co-occurrence relationship).

4. Themes visualization and categorization. The themes detected in each period by the clustering algorithm are visually represented in a strategic diagram of thematic networks (which we also refer to as the "maps"). Each theme takes the name of the most central keyword (the one with the most connections to the other keywords in the cluster). The maps organize themes in four quadrants (see Appendix 4) according to 1) their centrality (how the subnetwork is externally connected) and 2) their density (how the subnetwork is internally connected). Centrality measures the degree of external cohesion of a theme; indicating that a cluster has many connections with other clusters. High density means that all the terms that comprise the subnetwork frequently appear together in articles; this can be interpreted as high internal cohesion. Themes in the upper-right quadrant are both well-developed and important for the structuring of a research field. They are known as the motor themes of the field, given that they present strong centrality and high density. They constitute the main focus of our analysis because their high centrality and density make them particularly important in the cognitive structure of the research field (Martinez-Aires et al., 2014).

Themes in the upper-left quadrant have well-developed internal ties but unimportant external ties and therefore are of only marginal importance for the field. These themes are specialized and peripheral. Themes in the lower-left quadrant are both marginal and weakly developed. The themes in

this quadrant have low density and low centrality and mainly represent either emerging or declining themes. Themes in the lower-right quadrant are important for a research field but are not yet well developed. This quadrant contains transversal and general, basic themes. SciMAT also produces a thematic network for each theme, showing a network graph (cluster) with the keywords for a given research theme and the links between them (see Appendix 5 for some examples).

5. Further Examination of Most Influential Articles in Each Motor Theme. After the generation of the maps, we delve deeper into the motor themes (MTs) with the examination of the 10 most-cited articles for each of the motor themes in each period, characterizing these articles in terms of (1) the dependent variable studied, (2) ESG factor focus, (3) unit of analysis, (4), discipline, and (5) method.

Our analysis of the maps and characterization of the most influential articles in each motor theme then enables us to discuss *what we study* (dependent variables, problem focus, and unit of analysis), *how we think about what we study* (theoretical bases), *who studies it* (which management disciplines are involved), and *how we study it* (the methodology).

RESULTS

The Evolution of Themes of Focus (Structural Diagram Output)

Figure 1 illustrates the structural diagram for each of the time frames.[6] We focus on ***motor themes*** (***MTs***). Understanding how MTs evolve is particularly useful in describing the evolution and likely

[6] These maps represent 115 journals over time, or 57, 78, 107, 113, and 111 journals per period, respectively. They reflect 25,701 keywords, employing 2,681, 3,531, 7,912, 9,578, and 14,482 per period. The keywords are grouped into 104 themes across all four quadrants: 17, 18, 22, 26, and 21 per period, respectively.

trajectory of a field's cognitive structure. We also discuss **subthemes (STs)**: those that cluster around the themes on the maps but do not appear on the map.[7]

Insert Figure 1 About Here

What Corporate Sustainability Researchers Study: Main Sustainability-Related Terms

We first interpret the evolution of the theme *Sustainability* based on the maps and subtheme clusters. *Sustainability* appears in the second period (2004–2008) as an MT. As MTs take the name of the most central keyword, this reflects the importance of the term "sustainability" in this period (Martinez-Aires et al., 2014). In the other periods, *Sustainability* is a subtheme satellite that links to other more prominent MTs. Specifically, in the first period (1994–2003), it appears as the largest subtheme satellite linked to the *Economics* MT. In period 3 (2009–2013), it is the largest ST linked to both the MTs *Consumers* and *Green*. In periods 4 and 5 (2014–2017, 2018–2021), *Sustainability* is a ST of the motor theme *CSR*.

CSR, consisting of "actions that appear to further some social good, beyond the interests of the firm and that which is required by law" (McWilliams & Siegel, 2001, p. 117), is the largest MT in periods 1, 4, and 5, including such STs as *Stakeholders*, *Socially Responsible*, *Governance, and Ethics*. The interrelationship that we observe between the themes *Sustainability* and *CSR* in the last two periods is consistent with Bansal and Song's (2017) observation that these terms have become increasingly combined, and perhaps even conflated.

The connections between *Sustainability* and concepts such as *CSR* and *Green* show that they are closely related. Interestingly, while *Sustainability* is associated with both environmental and social STs,

[7] See Appendix Fig. 3 for an example: the ST cluster network for the motor theme Sustainability in period 2. ST cluster network images are available upon request; omitted due to space constraints.

Green is linked to mostly environmental STs (e.g., *Environmental performance*, *Natural environment)*. *CSR* is linked to socially-oriented STs, but not to any STs related to the natural environment.

Regarding environmental concerns, our findings indicate that terms related to this subject are relatively less prevalent when compared to more general management or theory terminology. This is particularly the case for periods 3-5. For example, issues related to climate change such as *Energy* and *Greenhouse gas emissions* are MTs in period 1, but disappear in periods 3-5 to resurface as *Climate change* is an MT in period 5. This trend is particularly noticeable during periods 2 to 4. For instance, topics related to climate change, like *Energy* and *Greenhouse gas emissions*, hold prominence as major themes in period 1, but disappear in periods 3 to 4. However, the significance of this topic resurfaces, with climate change reemerging as an MT in period 5.

MTs also comprise terms reflecting sustainable management practices, such as *Compliance* and *Socially responsible investment* (period 2), *Certification* (period 3), *Environmental disclosures* (periods 4 and 5), and *Eco-innovation* in period 5. With the exception of climate change in period 5, a trend becomes apparent —there's a shift from addressing specific environmental challenges (i.e. pollution, which is an MT in period 1) towards the more general description of firm practices related to sustainability (i.e. certification, MT in period 3).

How Corporate Sustainability Researchers Think about What We Study: Theoretical Bases

The maps shed light on the evolution of the main theoretical bases employed in corporate sustainability research. As shown in Figure 1, the dominant theory is the *Resource Based View* (RBV) (a motor theme in periods 1, 3, and 4), with the *Dynamic capability approach* following in period 2. Another theoretical approach important to the field is stakeholder theory, reflected by the fact that *Stakeholder* and *Stakeholder theory* (or *model*) are STs of the *Corporate Social Responsibility* MT in

periods 1 and 5. *Stakeholder Theory* and *Stakeholder Management* are ST satellites of the *CSP* motor theme in period 2 *Stakeholder Management* appears again as an ST of the *CSP* MT in period 4. Given the predominant linkage of CSR and CSP to social-, but not natural environment-, oriented keywords as discussed in the prior section, these results reflect the linkage between stakeholder theory and the social aspects of sustainability research. In period 3, *Stakeholder management* and *Stakeholder theory* are associated with the *Financial performance* MT and *Stakeholders* links to the *Governance* theme in periods 2 and 3. Regarding stakeholder focus, we observe that *Consumers* is an MT in periods 3, 4, and 5. *Employee* is also an MT in periods 3. *Shareholders*, *investors*, and *board members* are STs linked to the *Corporate Governance* motor theme in periods 3, 4, and 5. Interestingly, we see the emergence of the theme *Mediating-role* in Period 5, which includes ST related to employees and customers; this points to the role of these stakeholders in mediating the relationships examined by researchers.

Figure 1 reflects that topics related to firm economic performance are persistently important to the field over time. *Economics* and *Organizational performance* are MTs in period 1, *Socially responsible investment* is an MT in period 2, *Financial performance* is the largest MT in 3, *Firm value* is an MT in 4, and *Economic growth* is an MT in 5.

Themes representing corporate governance issues appear on the maps as basic or transversal themes, but not MTs, in periods 1 and 2, and then emerge as MTs in periods 3, 4, and 5. This indicates a relative shift towards interest in governance-related issues in the field over time. *Governance* is linked to STs such as *investors*, *shareholders*, *directors*, *gender diversity*, and *corruption*. Interestingly, it is also related to the ST *shareholder activism*; shareholders' involvement in urging firms to adopt sustainable practices. Other theoretical lenses and topics also emerge in periods 3-5, including those relating to institutional theory, innovation, and entrepreneurship.

To characterize the main theoretical approaches identified by the mapping analysis in more depth, we next examine STs linked to key motor themes in more detail, as well as draw on representative articles included in key themes. In period 1, *Economics* is an MT. It includes STs relating to the economic system and issues pertinent to material use, as well as international and legal issues (STs of the *Economics* theme include *change, demographics, material, need, capital, growth, international, legal, long-term, sustainability, and economic system*). Some articles appearing in the *Economics* theme describe market economic-system drawbacks in dealing with environmental issues. For example, they refer to the large ecological footprint associated with economic growth, and the disconnect between the market economy and nature's economy, "which consists of the natural systems and resources that support the market" (Hart, 1997, p. 67). While these observations have previously led to calls for the development of more stringent regulations (Barrett, 1991), scholars in this period start to look within the market economy for solutions to the environmental problem (Porter & van der Linde, 1995a, 1995b; Florida, 1996). Most studies take a strategic management research perspective and emphasize how environmental management approaches can affect firm competitiveness (Aragon-Correa, 1998; Hart, 1995; Marcus & Geffen, 1998; Maxwell et al, 1997; Rugman & Verbeke, 1998; Russo & Fouts, 1997; Sharma & Vredenburg, 1998). For example, the proposed business solutions to environmental problems include reducing costs or seeking market advantages through environmental differentiation strategies (Reinhardt, 1998; Shrivastava, 1995; Stead & Stead, 1995). It is noteworthy that social issues are absent in this economics-oriented literature.

The Resource-based View (RBV), Institutional Theory, and Dynamic Capabilities. The RBV theory connects a firm's performance to its unique organizational resources and capabilities (e.g., Barney, 1991; Wernerfelt, 1984). In period 1, it emerges as an ST of *Capabilities* in the lower-left quadrant, coinciding with seminal works by Hart (1995) and Russo and Fouts (1997), inspiring further

exploration (Christmann, 2000). In this context, natural resources can be viewed as a subset of a firm's resources. Firms with access to unique and valuable natural resources (e.g., sustainable raw materials, renewable energy sources) can leverage these assets to gain a competitive edge. By period 2, RBV evolves into an MT, including analyzing external conditions driving the adoption of environmental practices and competitive advantage (Aragon-Correa & Sharma, 2003).

To study these external factors, some authors employ institutional theory, emphasizing the contextual norms and institutions within which firms operate (Hoffman, 1999; Hoffman, 2001; Hoffman & Jennings, 2015). *Institutional theory* emerges in period 3, growing into an MT by period 5. This shift veers the sustainability field from an economics foundation to include sociological aspects (Hoffman, 2001). A few studies explore the interaction between RBV and institutional theory in shaping environmental practices (Bansal 2005; Delmas & Toffel 2008). One criticism of the literature in these early periods is that it predominantly viewed the firm as a black box, missing the opportunity to explore the intricate processes that drive decision-making and the effective execution of corporate sustainability practices and initiatives (Delmas & Toffel, 2008).

In period 3, RBV is linked to the *Financial performance* MT. Scholars begin to encourage a dynamic approach, considering how resources evolve with shifting external conditions (Bansal & Roth, 2000). *Dynamic capabilities*, referring to the firm's adaptability to a changing environment (Teece et al., 1997; Russo 2009), becomes an MT. In periods 4 and 5, RBV appears again as an MT, integrated with the dynamic-capability approach (Ocasio et al., 2018; Bocken & Geradts, 2020). Going beyond the analysis of the firm as the main unit of analysis, sustainability-based supply chain management research also employs RBV (Beske et al., 2014; Longoni et al., 2018; Sarkis et al., 2011; Wolf, 2014), for example connecting these operations to competitive advantage (Hunt & Davis (2012).

Additional Theoretical Approaches. Less dominant theoretical approaches are also reflected on the maps. Most notably, stakeholder theory persists as a subtheme across all periods of our analysis. Innovation and entrepreneurship-related theories also appear in the later periods.

Stakeholder theory is present as a subtheme in the MT of corporate social responsibility. Introduced by Freeman, this theory highlights the intricate interrelations between businesses and their stakeholders, such as customers, employees, investors, and communities (Freeman, 1984). It champions value creation for all stakeholders, not just shareholders (Goodpaster, 1991). Early on, scholars aimed to comprehend and categorize stakeholders (Harrison & Freeman, 1999), less focused on establishing their connection to corporate performance connections (Steurer, 2006; Phillips & Reichart, 2000; Starik, 1995; Mitchell et al., 1997). Subsequently, a view of stakeholder management that linked positive relationships with stakeholders to competitive advantage emerged (Jones, 1995; Henisz et al., 2014; McWilliams & Siegel, 2001; Schaltegger et al., 2019). Over time, stakeholder theory diversified further, tackling stakeholder relations as a multifaceted, multi-objective phenomenon (Bridoux & Stoelhorst, 2014; Garcia-Castro & Aguilera, 2015). This expansion is evident in applying stakeholder theory to the natural environment facet of sustainability (Darnall et al., 2010; Kolk & Pinske, 2007; Wolf, 2014; Freudenreigh et al., 2020), as well as integrating it with RBV (Fowler & Hope, 2007; Litz, 1996) and institutional (Delmas & Toffel, 2004; Doh & Gay, 2006) theories.

Other terms point to the emergence of theories related to *entrepreneurship* and *innovation*. Namely, Innovation appears as a basic/transversal theme in periods 1, 3, and 4, becoming an MT in period 5 and Social entrepreneurship appears as a specialized/isolated theme in period 3 and an emerging theme in period 5. This reflects that the role of innovation in facilitating businesses' generation and adoption of sustainable practices is drawing increased interest. Sustainability innovation, via product or process technology as well as governance innovation, is considered a key driver of sustainable development

(Porter & Van der Linde, 1995; Nidumolu et al., 2009; King & Lenox, 2000; Xie et al., 2019). There is interest in the conditions under which sustainability innovation is likely to occur (Pinkse & Kolk, 2010; Schaltegger & Wagner, 2011). The fact that Entrepreneurship, Corporate entrepreneurship, and Social entrepreneurship are STs of the Innovation theme in periods 1, 3, and 4 reflects researchers' frequent identification of entrepreneurs as critical to this process. The entrepreneurship literature often adopts an optimistic narrative wherein societal challenges present opportunities for entrepreneurs to innovate and engage in transformative thinking. Earlier research on sustainability and entrepreneurship dealt mostly with environmentally-oriented entrepreneurship, often called "ecopreneurship" (Cohen, 2006; Russo, 2001; Schaltegger, 2002; York & Venkataraman, 2010). Research on the relationship between entrepreneurship and social problems has become more prominent in subsequent periods (Bacq & Eddleston, 2018; Mair et al., 2012; Stephan et al., 2016).

Themes of Focus in the Later Time Periods. We examine the last period in detail to delve into the field's more recent trajectory. The largest MTs are *Corporate Social Responsibility*, *Governance* and *RBV*, with limited connections to the natural environment. However, we find three MTs with an environmental focus, namely *Climate Change*, *Eco-Innovation*, and *Environmental Disclosures*. Interestingly these themes exhibit relatively limited connections to the RBV approach (See these MTs' clusters, including STs, in Appendix 5). Instead, their STs focus on distinct topics, such as the measurement of sustainability performance (Pindyck, 2019; Mikkelson, 2021; Talbot & Boiral, 2018), and the drivers and determinants of the communication about sustainability practices (Giannarakis et al., 2018; Lewis et al., 2014; Carlos & Lewis, 2018; Hawn & Ioannou, 2016; Pucheta-Martinez et al., 2020), and of firms' engagement in substantive practices versus "greenwashing" (Delmas and Burbano, 2011; Lyon and Montgomery, 2015; Tashman et al., 2019). Furthermore, this period also witnesses the emergence of a burgeoning literature concerning adaptation and innovation in response to climate

change (Ferreira et al., 2020; McKnight & Linnenluecke, 2016; Clement & Rivera, 2017). Of particular note, the MT centered on *climate change* not only stands independently but also connects with the *Economic-Growth* MT through its STs (*Economic-Growth* has the following STs related to climate change: *Energy consumption*, *Co2 emissions*, *Carbon emissions*, *Renewable energy*; *Climate change* includes *Growth* as an ST).The emergence of these thematic pursuits during the later period signifies a potential shift, towards a reinvigorated emphasis on environmental concerns, mirroring the attention observed during the field's initial phase. Simultaneously, this resurgence reflects a quest for new paradigms to explain these evolving dynamics.

Examination of Motor Themes' Most-Cited Articles

To further examine the drivers of the most central concepts, we characterize the 10 most-cited articles for each of the 35 MTs (the upper-right quadrant of the maps) in each period (see Appendix 7 for the article list by MT) in terms of (1) the dependent variable studied, (2) ESG factor focus, (3) unit of analysis, (4), discipline, and (5) method. Our unit of analysis is the article; our sample is 350 articles.

What Corporate Sustainability Researchers Study

Dependent variables (DVs). First, we examine the evolution of the nature of the DVs of focus in the most influential empirical articles. We classify articles' DVs based on whether they represent environmental and/or social outcomes, or financial-performance outcomes, given the observation that there has been too much of a focus on the latter (Barnett, et al., 2020). [8] In the early periods (see Appendix 6a), most top-cited articles focused on the environmental impact of corporations (70% in

[8] Financial outcomes include variables like stock return or growth rate (Russo et al., 1997; McWilliams & Siegel, 2001; Surroca et al., 2010). Impact outcomes include a dual approach to valuing S02 allowances (Coggins & Swinton, 1996) and connections between the managerial interpretations of environmental issues and corporate choices of environmental strategy among firms (Sharma, 2000), for example.

period 1 and 72% in period 2), using DVs such as pollution levels and community-level exposure to toxins. In periods 3 and 4, there was a rise in profit-driven DVs (63% in periods 3 and 4), including direct accounting ratios and shareholder value. In the most recent period, there has been an almost equal split between outcomes that are social or environmental in nature and those that are financial performance-oriented. This suggests a more recent shift towards sustainability research that considers both financial and non-financial outcomes in the most impactful articles.

ESG focus. Second, because the theoretical construct of corporate sustainability includes environmental, social, and governance (ESG) facets (Dyllick & Hockerts, 2002; Van Marrewijk, 2003), we categorize the top-cited articles in the motor themes as such to further examine the evolution of these three facets of sustainability over time (see Appendix 6b). More than half (55%) of the 50 journal articles examined in period 1 focus on the environmental facet, with articles focused on the social and government factors trailing with 18% and 27%, respectively. This is consistent with our earlier analysis of the maps, and it supports scholars' observation of an environmental emphasis in early sustainability research (Van Marrewijk, 2003). For example, the article by Russo and Fouts (1997), one of the top-cited articles under the themes of *Organizational Performance* and *CSR*, analyzes over 200 firms to show a positive relationship between environmental performance and economic performance. In periods 2 and 3, the social facet dominates, with 58% and 52%, respectively, of the top-cited articles reviewed, ahead of environment (15% and 24%) and governance (26% and 24%).

We also observe influential articles that examine more than one ESG facet, such as those by Scherer and Palazzo (2011) and Godfrey et al. (2009). Both are top-cited articles in the third period under the *Financial Performance* theme, in which the social and governance factors are the dominating facets. Others study both the social and environmental sides of the business, including how a CEO's

family relationship impacts environmental performance (Berrone et al., 2010), or how environmental and social standards contribute toward legitimacy in supply chain governance (Mueller et al., 2009).

The governance facet of ESG leads for the first time in period 4 as the topic of focus of 50% of the most-cited MT articles, followed by social (35%) and environmental (15%). The top-cited governance-focused articles in period 4 include an analysis of the impact of board of directors on the quality of CSR disclosure (Jizi et al., 2014). The focus on the governance dimension of ESG remained prevalent, in period 5 (44%, compared to 35% social and 20% environmental).

Unit of analysis. Third, we examine the evolution of the unit of analysis these articles employ (see Appendix 6c).[9] The dominant unit of analysis is the Firm, whose prevalence decreases from 66% and 71% in periods 1 to 49% and 53% in periods 3 and 4, then increases to 76% in the last period. The use of the Individual unit of analysis fluctuates, between 4% and 18% across periods. Literature reviews and theory (non-empirical) papers, often highly cited and thus high impact, are also reflected in these most impactful articles (making up between 9 and 30%). The use of Country as the unit of analysis fluctuates but remains minimal, starting at 4% in our first period and making up 8% in the last. Business Unit and Regulation articles remain sparse throughout the periods, while the proportions of using Industry, Community, and Facility as the unit of analysis all decrease over time.

Who Studies Corporate Sustainability

Disciplinary approaches. We classify the top-cited articles by discipline using the field categories from Harzing's Journal Quality List (see Appendix 6d). In terms of the general field categories, we observe a significant decrease in the share of most impactful MT articles published in the General &

[9] We group units of analysis into the following types: Individual (Consumer/Household), Firm, Industry, Business Unit, Facility (Factory/Plant), Country, Community, Article (Literature Review), and Regulation (Standards/Ecolabel/Regulation)

Strategy category over time, dropping from 60% to 22% between periods 1 and 5. This group consists of articles published in such journals as the *Academy of Management Review, Harvard Business Review,* and *California Management Review*. Similarly, articles in Economics journals saw a decline from 24% in the first period to 1–5% in the last three. These declines were compensated by growing interest in sustainability topics Organizational Behavior and Innovation. Publications in the Organization Studies/Behavior, Human Resource Management, Industrial Relations; International Business (OS/OB, HRM/IR) area increased from only 2% in the first period to 33% in the last. Likewise, for Innovation, we see a significant jump from 4% in the first period to 25% in the last. In addition, we observe that the share of articles published in sustainability-focused journals increased from 26% to 53% between periods 1 and 5 (see Appendix 6e).

How We Study Corporate Sustainability

Methods. We categorize methods into six types: quantitative based on secondary data, quantitative based on survey data, qualitative, experimental, theoretical/conceptual development, and review articles. The most common method was quantitative secondary-data analysis, making up 36, 32, 40, and 59% of the most impactful articles in periods 1, 2, 4, and 5, respectively (see Appendix 6f). Quantitative survey data fluctuated between 10% and 23% of the most impactful articles. The proportion of theoretically and conceptually focused articles was relatively high (18-29%) in the first four periods, dropping to 6% in the last. Review papers showed a slight increase and then another decrease, with a peak in period 3. Qualitative research decreased from 10 and 22% in the first periods to 4%-8% in the last three, while experimental techniques were the least used in all five periods.

DISCUSSION

We provide a high-level summary of the evolution of the cognitive structure of the field in Figure 2, organizing our results into the categories of what we study, how we think about what we study, who studies it, and how we study it. For ease of exposition, the first row indicates the early phases of our analysis (periods 1 and 2), and the second, the more recent phases (periods 3 to 5). The last row describes high-level opportunities for future research.

Insert Figure 2 About Here

Note that science mapping is used to identify and analyze the emergence and evolution, relative importance, and relationships between, the different facets of a field over time (Montero et al, 2018), but does not provide a benchmark for what the ideal evolution of the field "should" be. It is outside the scope of this methodology itself to identify the counterfactual; what has been missing or would have been a "better" evolution of the field. Thus, as is common for research reviews using historical bibliometric analysis (Ohlan et al., 2022), we bring to bear some of our own perspectives in what follows to outline recommendations for future research. While academic research can serve a multitude of objectives, our perspective centers on the notion that the research should contribute to addressing sustainability challenges and facilitating transformative changes by firms. Specifically, our recommendations take the lens of encouraging future research which has the potential to move the needle in terms of organizational change for improved (practical) environmental (and social) outcomes.

What Corporate Sustainability Researchers Study: The Evolution and Trajectory

Dependent Variable. As summarized in Figure 2, our examination of the historical evolution of the field illustrated a shift away from environmental-impact-oriented articles early on and towards articles with a profit-impact oriented dependent variables. This coincided with a grounding of

sustainability research in economics and strategy, with much of the research in the later periods examining the relationship between corporate sustainability and corporate performance. Studies in the early periods largely treated the firm as a black box, however, with little examination of the individual motivations and organizational decision-making processes for corporate sustainability practices and actions. An understanding of such processes is critical for encouraging organizational change.

Problem area of focus. Corporate sustainability research initially focused on the interaction between business and the natural environment, and has expanded to include social and governance issues. The importance of the "S" and "G" dimensions has increased relative to the natural environment ("E") over time. Research has raised concerns about whether the sustainability practices studied have a real and substantive societal impact or if they are only symbolic gestures made by corporations to show their commitment to sustainability, pointing to the importance and challenge of measurement for understanding the impacts of business choices on the environment (and society); a precursor for encouraging effective change at the organization level.

Unit of Analysis. Our study highlights the dominance of firms as the primary unit of analysis in corporate sustainability research. Overlooking opportunities for macro-level analysis at the country level can hamper comprehension of the wider social, political, and economic context in which firms operate, thereby limiting insights into the factors influencing their sustainability practices. The limited analysis at the individual, business unit, and facility-levels of analysis could restrict understanding of the human dimension and more granular decision-making drivers of sustainability issues, all of which are needed to foster generation of effective sustainability strategies in firms.

What Corporate Sustainability Researchers Study: Recommendations for Future Research

Understanding Impact. Part of the reason it is challenging to determine the effectiveness of corporate sustainability research in addressing grand challenges is simply that extant research does not evaluate the impact of corporate sustainability practice on society and the environment (Barnett et al, 2020). To remedy this, scholars need to think more deeply about which metrics of environmental and societal impact to develop and analyze. Generating such measures will likely require researchers to collaborate with both private rating organizations and scientists from different fields. For example, addressing the possibility that corporate cumulative environmental impacts may cross an ecological threshold requires the engagement of natural scientists (Whiteman et al., 2013). On the social side, studying well-being at the organizational and societal levels would benefit from collaboration with both sociologists and psychologists (Durand, 2015; Harrison & Wicks, 2013, Shinwell & Shamir, 2018).

Understanding Trade-offs. While we have observed an increase in research addressing both environmental and social dimensions in relation to corporate performance, the field often ignores inherent tensions and trade-offs between them (Hahn et al., 2015). Understanding these is critical for positive societal and environmental change. This can be illustrated with tensions between environmental justice and more traditional environmentalism. Environmental justice signifies a shift away from traditional environmentalism and towards affirming the value of all life forms against the abuse of technology and interests of wealth and power (Cock, 2011). Environmentalism prioritizes nature preservation, while environmental justice prioritizes communities hit by pollution. Corporate contributions to sustainable development must recognize potential trade-offs between environmental and social objectives, not assume complementarity (Hahn et al., 2010). Research on these trade-offs offers future promise.

In our analysis, we observed a rise in the number of studies focused on business governance, the G in "ESG." *Corporate Governance* is a MT in Period 3-5. It involves rules and practices that control a firm, often focusing on shareholder's interests and thus directing managers towards profit maximization. While initially neglecting environmental concerns, we observe the promising development of research on shareholder activism towards sustainability (Flammer et al., 2021) and of new governance models like social enterprises, which incorporate environmental and social purpose within business. In the U.S., for example, the legal status of "benefit corporation" extends the fiduciary duties of executives to non-shareholder stakeholders, authorizing the pursuit of corporate purposes in addition to maximizing stockholder welfare (Gehman et al., 2019). However, benefit corporations face challenges in balancing financial sustainability with social impact and gaining acceptance from stakeholders (Cooper & Weber, 2021). Future research could investigate how leaders can manage these tradeoffs and how these new governance structures can diffuse through the marketplace.

How We Think about What We Study: the Evolution and Trajectory

Initially rooted in economics and strategy, research on corporate sustainability heavily relied on the RBV. A stakeholder view has also gained prominence as an important theoretical base. While widely used theories like RBV concentrated on corporate performance, they remain limited in analyzing societal impact as an outcome. However, newer approaches have emerged in more recent periods, including perspectives centered on social entrepreneurship and innovation.

How We Think about What We Study: Recommendations for Future Research

Complex environmental issues like climate change are hard to address due to their uncertainty and conflicting stakeholder incentives (Henriques, 2018). These problems lack clear solutions, and tackling one aspect can lead to unintended consequences in others. This leads to challenges in developing useful

theories of organizational change (Jick & Sturtevant, 2017). Within this context, we propose that future research should integrate both individual and wider systems-level considerations to develop such theories of organizational change.

Individual-level theoretical bases. Drastic shifts will be required to align stakeholder incentives towards common sustainability goals. At the individual level, then, theory development will be vital to understand the motivations of individuals within organization such as CEOs, boards of directors, employees, customers, and investors to adopt sustainable practices and behaviors (Desjardine & Shi, 2021), transcending economists' stylized models that often lack real-world relevance due to their many assumptions (Shogren & Taylor, 2020). As an illustration, recent research has unearthed that individual perceptions of time play a pivotal role in influencing sustainable actions (Bansal et al., 2022). Deeper insight into how to influence such perceptions will be imperative for encouraging organizational change towards sustainable outcomes.

Understanding the perceptions and behavioral responses of internal stakeholders like employees and firm leaders towards corporate sustainability practices will be crucial for encouraging their implementation within organizations (Bode et al., 2015; Bode & Singh, 2018; Burbano 2016, Burbano & Chiles, 2021; Delmas & Pekovic, 2013, 2018; Farooq et al., 2017; Flammer & Luo, 2017). Existing individual-level studies often focus on preferences and behavior towards hypothetical sustainability practices, possibly compromising conclusions due to social desirability bias. To elevate the rigor of this line of research, future research could seek to examine stakeholders' revealed preferences and actual behavior (Abraham and Burbano, 2022; Burbano, 2016; Shea & Hawn, 2019).

Systems-level theoretical bases. While focusing on the micro level is necessary for understanding motivations and mechanisms within and between organizations and stakeholders, it is important to recognize that the economic, social and governance systems surrounding organizations also wield

substantial influence on the results of their actions (Marquis et al. 2007). Thus, to understand how firm choices can help, rather than exacerbate, environmental issues such as climate change, it is critical to examine the broader system in which these firm choices take place. Indeed, exploring and advancing sustainable solutions necessitates considering a firm's interconnectedness within its various contexts, including industry, supplier, regulatory, and institutional environments. Studies carried out at the industry and country levels (Crifo et al., 2019; Vogel, 2019) can substantially enhance our understanding of the drivers and outcomes resulting from sustainability practices in contexts more closely related to the wider system. They can also reveal potential trade-offs and unforeseen ramifications of sustainability practices.

A thorough exploration of supply chains, which embraces a broader perspective on firm operations by integrating its network of suppliers into the analysis (Zhu et al., 2013), represents a significant advancement towards understanding the larger system. Likewise, delving into the intricacies of the circular economy—a framework wherein materials undergo continuous cycles and nature undergoes revitalization—holds promise in informing how to tackle systemic challenges from an engineering vantage point (Geissdoerfer et al., 2017; Kuhlmann et al., 2023). It is important to highlight that, despite its potential implications, the concept of the circular economy remains somewhat underserved within the current body of literature.[10]

In addition, government regulations have been a significant factor in shaping corporate sustainability practices, receiving substantial attention in early corporate sustainability research (Delmas & Young, 2009; Majumdar & Marcus, 2001). However, in more recent periods, only a limited

[10] The term circular economy appears in Period 5 as an ST of the MT *Environmental Management;* located in the lower-right quadrant, its location reflects it is an important but not yet well developed MT.

number of management studies have explored the role of government and regulation in influencing corporate sustainability or the reciprocal influence of firms on government and regulation (Aragon-Correa et al., 2020). Still, astute firms can play an important role in either adopting symbolic voluntary practices to avoid regulation or shaping regulation to their advantage through Corporate Political Activity (CPA) (Delmas & Montes-Sancho, 2010; Werner, 2017; Minefee et al., 2021; Steelman & Rivera, 2006). Research shows that CPA may be the most important element of a company's sustainability strategy in terms of determining its impact on society and the environment (Lyon et al., 2018). Voluntary practices have so far been inadequate in improving environmental challenges, making it crucial for sustainability researchers to focus on studying the role of government and regulation in corporate sustainability, as well as the impact of CPA, on firms' sustainability strategies.

Towards a Multilevel Theory of Motivations, Systems, and their Interactions. Systems thinking encompasses a multilevel approach, involving both macro-level and individual considerations (Starik & Rands, 1995; Landrum, 2018; Schilke, 2018). Analyzing the interplay between institutional and stakeholder pressures through a systemic and multilevel lens offers a more comprehensive understanding of how firms respond to complex societal issues compared to approaches solely centered on institutions or stakeholders (Grewatsch et al., 2021). The call to integrate the micro- and macro-level understandings of sustainability is not new. Initially proposed by Starik and Rands in 1995, it has proved challenging to answer because of the multiple actors to integrate (Dyllick & Muff, 2016). Adopting a multilevel perspective often requires familiarity with systems and methodological approaches that are particular to specific fields. Thus, researchers may have to integrate methodologies from other fields or extend the boundaries of their field of study.

Who Studies Corporate Sustainability: The Evolution and Trajectory

Originally, the disciplines of economics and strategy dominated the field. Over time, the incorporation of additional perspectives from different areas of business scholarship, including marketing, human resources, operations, entrepreneurship, and finance, has enriched it. In turn, this has broadened the scope of focus of the areas of the firm that can influence and be influenced by sustainability problems and issues. Associated with these changes, we observe a decrease in the proportion of articles published in the General & Strategy and Economics categories over time, and an increase in the share of publications in journals representing other areas of business scholarship, as well as sustainability journals, constituting the majority of impactful publications in the last period. Nevertheless, development in each of these different fields of business scholarship remains siloed and seems to develop in parallel, missing opportunities to build on each other.

Who Studies Corporate Sustainability: Recommendations for Future Research

Adopting Interdisciplinary Approaches. Broadening research to encompass diverse management areas can help facilitate the identification of potential solutions initiated by the firm to improve the environment and society. Going forward, as previously proposed, there is a potential for innovative research to emerge through the engagement and collaboration of management researchers with those from the broader social sciences, natural sciences, and engineering fields. Indeed, theories of collective action and the tragedy of the commons, developed within political sciences (Hardin, 2015), can provide valuable insights into various innovative governance models. Additionally, engineering approaches employing life cycle methodologies offer a promising perspective for envisioning sustainable impact that extends beyond corporate boundaries (Kuhlmann, et al., 2023). Corporate sustainability journals could play a pivotal role in facilitating, fostering, and incentivizing cross-fertilization across disciplines.

In addition, interdisciplinary science journals offer a promising avenue to extend the impact of sustainability research beyond the realm of management scholars (Kareiva et al., 2015).

How We Study Corporate Sustainability: The Evolution and Trajectory

Our analysis suggests that influential empirical sustainability research has predominantly relied on the analysis of quantitative archival data, with some also using survey data. Both methods offer advantages, yet come with limitations. For example, quantitative archival data can facilitate longitudinal analyses, but may be subject to lower criteria for measurement validity when collected outside of academia (Ketchen et al. 2013). While the reliance on such data isn't specific to corporate sustainability research, it is particularly problematic if used for normative purposes. Conversely, surveys provide valuable insights into stated preferences and behavior but may not accurately predict actual behavior. Moreover, both methods often involve firms and managers as research subjects rather than active partners in knowledge development, thus limiting the transfer of knowledge from research to practice (Sharma & Bansal, 2020; Hahn et al 2021; Williams & Whiteman, 2021).

How We Study Corporate Sustainability: Recommendations for Future Research

To address these limitations, there is an opportunity for future researchers to conduct research in closer collaboration with firms, which would likely be accompanied by a shift in methodological focus. For instance, sustainability researchers could work more closely with organizations to conduct field experiments, which are considered the gold standard method for causality and understanding drivers of behavioral change (Delmas & Aragon-Correa, 2016). Field experiments remain underutilized in sustainability research, though recent studies are beginning to employ this method in sustainability research (Amengual & Apfelbaum, 2021; Burbano, 2016, 2021; Portocarrero & Burbano, 2022; Spicer et al., 2021; Salmivaara & Lankoski, 2021). Furthermore, researchers could engage in a system of

knowledge co-creation, which involves both managers and researchers participating in discussions, projects, and events to produce knowledge that addresses mutual interests (Sharma & Bansal, 2020).

So far, private rating organizations have led in the development of metrics for measuring the E, S, and G facets of sustainability (Delmas et al., 2013). Researchers have not participated in this process other than to conclude that the metrics are unreliable, invalid, not up to scientific standards, and susceptible to greenwashing (Chatterji et al., 2016). Reliable, accurate measures of impact on society and the environment will be essential for research to yield valid conclusions and avoid the possible use of metrics for greenwashing (Lyon & Montgomery, 2015). There could thus be an opportunity for researchers to collaborate with private rating organizations and natural scientists to generate such measures.

CONCLUSION

Despite a proliferation of research in the field, pressing environmental (and social) challenges continue to worsen. Given that businesses play a central role in either exacerbating or improving such challenges, it is critical to consider how corporate sustainability research in the business domain can help facilitate the grand challenges being faced by our society. Towards this aim, it is important to understand the prior historical evolution of the cognitive structure of the research field, as this facilitates the forecasting or prediction of the trajectory, or likely path, of future sustainability research.

Our science mapping methodology, and our categorization and analysis of the articles most influential to the central terms identified by our mapping, enabled us to characterize the historical evolution of the past three decades of research in the field in terms of *what we study* (dependent variables, problem focus, and unit of analysis), *how we think about what we study* (theoretical bases), *who studies it* (disciplines), and *how we study it* (methodology).

Certainly, our review is not without limitations. The process of selecting, evaluating, and synthesizing studies, inherent to scientometric studies, introduces the implicit assumption that the journals and keywords utilized are representative of the cognitive output of the field. This may lead to an under-representation of related research outside of the business domain and/or on which the academic organizations whose keywords served as the initial basis of our potential list of keywords do not focus. Our analyses and discussion should thus be interpreted as bounded to corporate sustainability research, as characterized by the prominent relevant organizations in the management field, and within the domain of business-oriented publications. Future research could look at the cross fertilization that occurs *between* the business literature and other fields. This might reveal exciting areas of cutting-edge research. We also note that, because our analysis leveraged article keywords, our evolutionary analysis is capped prior to 1994, since the related articles prior to that year did not have keywords.

Our analysis highlights the need for future research that facilitates organizational (and systems-level) change. While there are encouraging indications of a renewed focus on seeking solutions to sustainability issues in the most recent period, the cognitive framework of the field continues to impede researchers from adopting a solution-oriented approach. We posit that as scholars within the domain of corporate sustainability, we need to alter not only what we study, but also the theories and methodologies we employ. It is also imperative that we engage with researchers beyond our own field to facilitate a more comprehensive and effective response to the challenges at hand.

Our findings suggest that the impact of this research on practice and society has been limited by theories that prioritize corporate profit over societal outcomes, as first highlighted by Barnett, Henriques, and Husted (2020), and a lack of engagement with both the business community and researchers beyond the field. Moreover, the incorporation of social and governance matters alongside environmental concerns may have introduced a level of ambiguity regarding the central emphasis of

the corporate sustainability field (Bansal & Song, 2017; Montiel & Delgado-Ceballos, 2014; Meuer et al., 2020). Yet, given the pressing nature of present-day ecological challenges, scholars will need to redirect their attention towards measuring and studying environmental problems. This entails developing robust frameworks for quantifying the scope and magnitude of environmental problems, allowing for a more accurate representation of their impact. Additionally, these frameworks facilitate an evaluation of the efficacy of management practices, shedding light on the outcomes of various approaches to addressing environmental challenges.

To mitigate corporations' negative impacts and enhance positive contributions to society and the environment, both external incentives (government regulations, governance changes) and internal incentives need reform. Developing theories that prioritize sustainable outcomes over profit-centric ones is pivotal in this pursuit and necessitates discussion of economic model trade-offs and limits, a topic that echoes earlier debates within the field. Promising directions for future research involve multilevel theoretical approaches that explicitly incorporate the roles of individuals, firms, and supply chains, in addition to broader systems-level and macro considerations. At the heart of this endeavor lie theories recognizing government as a catalyst for driving transformative shifts and to address societal and environmental challenges. Furthermore, by embracing the circular economy's regenerative ideals, researchers can chart innovative paths towards sustainability by bringing in knowledge from other fields such as engineering. Additionally, we propose that innovative research could arise from researchers who gather original data and foster collaborations spanning management disciplines, social sciences, the natural sciences, and engineering.

REFERENCES

Abraham M., & Burbano, V.C. (2022) Congruence between leadership gender and organizational claims affects the gender composition of the applicant pool: field experimental evidence. *Org Sci*, 33(1): 393-413.

Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *J of Mgmt*, *38*(4), 932-968.
Amengual, M., & Apfelbaum, E. P. (2021). True motives: Prosocial and instrumental justifications for behavioral change in organizations. *Mgmt Sci*.
Aragón-Correa, J. A. (1998). Strategic proactivity and firm approach to the natural environment. *Acad Mgmt J*, *41*(5), 556-567.
Aragon-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Acad Mgmt Rev, 28*(1), 71–88.
Aragon-Correa, J. A., Marcus, A. A., & Vogel, D. (2020). The effects of mandatory and voluntary regulatory pressures on firms' environmental strategies: A review and recommendations for future research. *Acad Mgmt A*, *14*(1), 339-365.
Bacq, S., & Eddleston, K. A. (2018). A resource-based view of social entrepreneurship: How stewardship culture benefits scale of social impact. J Bus E, 152(3), 589-611.
Bansal, P. (2005). Evolving sustainably: A longitudinal study of corporate sustainable development. *Strat Mgmt J, 26*(3), 197-218.
Bansal, P., & Hoffman, A. J. (Eds.) (2012). *The Oxford handbook of business and the natural environment*. Oxford University Press.
Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Acad Mgmt J, 43*(4), 717-736.
Bansal, P., Reinecke, J., Suddaby, R., & Langley, A. (2022). Temporal Work: The Strategic Organization of Time. *Strategic Organization,* 20(1), 6-19.
Bansal, P., & Song, H. C. (2017). Similar but not the same: Differentiating corporate sustainability from corporate responsibility. *Academy of Management Annals*, 11(1), 105-149.
Barnett, M. L., Henriques, I., & Husted, B. W. (2020). Beyond good intentions: Designing CSR initiatives for greater social impact. *J of Mgmt*, *46*(6), 937-964.
Barney, J. (1991). Firm resources and sustained competitive advantage. *J of Mgmt*, *17*(1), 99-120.
Barrett, S. (1991). Environmental regulation for competitive advantage. *Bus Strat Rev, 2*(1), 1-15.
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? *Admin Sci Q, (55)*1, 82-113.
Beske, P., Land, A., & Seuring, S. (2014). Sustainable supply chain management practices and dynamic capabilities in the food industry: A critical analysis of the literature. *Intl J of Prodcn Econ*, *152*, 131-143.
Bocken, N. M., & Geradts, T. H. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long Range Planning*, 53(4), 101950.
Bode, C., & Singh, J. (2018). Taking a hit to save the world? Employee participation in a corporate social initiative. *Strat Mgmt J*, *39*(4), 1003-1030.
Bode, C., Singh, J., & Rogan, M. (2015). Corporate social initiatives and employee retention. *Org Sci*, *26*(6), 1702-1720.
Brammer, S., Branicki, L., & Linnenluecke, M. (2022). Mission Accomplished? Reflecting on 60 Years of Business & Society. Bus & Soc, 61(5), 980-1041.
Bridoux, F., & Stoelhorst, J. W. (2014). Microfoundations for stakeholder theory: Managing stakeholders with heterogeneous motives. *Strat Mgmt J*, 35(1), 107-125.
Burbano V.C & Chiles B (2021). Mitigating gig and remote worker misconduct:evidence from a real effort experiment. *Org Sci*. 33(4):1251-1699.
Burbano, V. C. (2016). Social responsibility messages and worker wage requirements: Field experimental evidence from online labor marketplaces. *Org Sci*, *27*(4), 1010-1028.
Burbano, V. C. (2021). The demotivating effects of communicating a social-political stance: Field experimental evidence from an online labor market platform. *Mgmt Sci*, *67*(2), 1004-1025.
Callon, M., Courtial, J. P., Turner, W. A., & Bauin, S. (1983). From translations to problematic networks: An introduction to co-word analysis. *Soc Sci Info, 22*(2), 191-235.
Carlos, W. C., & Lewis, B. W. (2018). Strategic silence: Withholding certification status as a hypocrisy avoidance tactic. Administrative Science Quarterly, 63(1), 130-169.
Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Bus & Soc*, *38*(3), 268-295.
Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. (2016). Do ratings of firms converge? Implications for managers, investors and strategy researchers. *Strat Mgmt J*, 37(8), 1597-1614.
Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: The role of complementary assets. *Acad Mgmt J*, *43*(4), 663-680.

Cobo, M.J., López-Herrera, A.G., Herrera-Viedma, E., & Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: A practical application to the fuzzy sets theory field. *J Informetrics, 5*(1), 146-166.

Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., & Herrera, F. (2012). SciMAT: A new science mapping analysis software tool. *J of the American Society for Information Science and Technology, 63*(8), 1609-1630.

Cock, J. (2011). Green capitalism or environmental justice: A critique of the sustainability discourse. *Focus, 63*, 45-51.

Coggins, J.S & Swinton, J.R. (1996). The price of pollution: A dual approach to valuing So2 allowances. *Journal Envir Econ and Mgmt, 30*(1), 58-72.

Cohen, B. (2006). Sustainable valley entrepreneurial ecosystems. *Bus Strat and Envir*, *15*(1), 1-14.

Cooper, L. A., & Weber, J. (2021). Does benefit corporation status matter to investors? An exploratory study of investor perceptions and decisions. *Bus & Soc, 60*(4), 979-1008.

Clément, V., & Rivera, J. (2017). From adaptation to transformation: An extended research agenda for organizational resilience to adversity in the natural environment. *Org & Envir*, 30(4), 346-365.

Crifo, P., Durand, R., & Gond, J. P. (2019). Encouraging investors to enable corporate sustainability transitions: The case of responsible investment in France. *Org & Envir, 32*(2), 125-144.

Dahlsrud, A. (2008). How corporate social responsibility is defined: analysis of 37 definitions. *CSR Envir Mgmt, 15*(1), 1-13.

Darnall, N., Henriques, I., & Sadorsky, P. (2010). Adopting proactive environmental strategy: The influence of stakeholders and firm size. *J Mgmt Stud*, *47*(6), 1072-1094.

Delmas, M. A., & Aragon-Correa, J. A. (2016). Field experiments in corporate sustainability research: Testing strategies for behavior change in markets and organizations. *Org & Envir, 29*(4) 391-400.

Delmas, M.A., & Burbano, V.C. (2011) The drivers of greenwashing. *Calif. Mgmt Rev.* 54(1): 64-87.

Delmas, M. A., Etzion, D., & Nairn-Birch, N. (2013). Triangulating environmental performance: What do corporate social responsibility ratings really capture?. *Acad. Mgmt Persp*, 27(3), 255-267.

Delmas, M. A., & Pekovic, S. (2013). Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *J Org Behav, 34*(2), 230-252.

Delmas, M. A., & Pekovic, S. (2018). Corporate sustainable innovation and employee behavior. *J Bus E, 150*(4), 1071-1088.

Delmas, M. A., & Toffel, M. W. (2008). Organizational responses to environmental demands: Opening the black box. *Strat Mgmt J, 29*(10), 1027-1055.

Delmas, M. A., & Young, O. R. (Eds.). (2009). Governance for the environment: New perspectives. Cambridge U. Press.

Delmas, M., & Toffel, M. W. (2004). Stakeholders and environmental management practices: an institutional framework. *Bus Strat & Envir*, *13*(4), 209-222.

Delmas, M. A., & Montes-Sancho, M. J. (2010). Voluntary agreements to improve environmental quality: Symbolic and substantive cooperation. *Strat. Mgmt. J.,* 31(6), 575-601.

DesJardine, M. R., & Shi, W. (2021). How temporal focus shapes the influence of executive compensation on risk taking. *Acad Mgmt J,* 64(1), 265-292.

Doh, J. P., & Guay, T. R. (2006). Corporate social responsibility, public policy, and NGO activism in Europe and the United States: An institutional-stakeholder perspective. *J Mgmt Stud,* 43(1), 47-73

Durand, M. (2015). The OECD better life initiative: How's life? And the measurement of well-being. Review of Income and Wealth, 61(1), 4-17.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Bus Strat Envir, 11*(2), 130.

Dyllick, T., & Muff, K. (2016). Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual

Etzion, D. (2007). Research on organizations and the natural environment, 1992-present: A review. *J. Mgmt*, 33(4), 637-664.

Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. *Intl J Prodcn Econ*, *162*, 101–114.

Farooq, O., Rupp, D. E., & Farooq, M. (2017). The multiple pathways through which internal and external corporate social responsibility influence organizational identification and multifoci outcomes: The moderating role of cultural and social orientations. *Acad Mgmt J 60*(3), 954-985.

Ferreira, J. J., Fernandes, C. I., & Ferreira, F. A. (2020). Technology transfer, climate change mitigation, and environmental patent impact on sustainability and economic growth: A comparison of European countries. Technological Forecasting and Social Change, 150, 119770.

Flammer, C., & Luo, J. (2017). Corporate social responsibility as an employee governance tool: Evidence from a quasi-experiment. *Strat Mgmt J*, *38*(2), 163-183.

Flammer, C., Hong, B., & Minor, D. (2019). Corporate governance and the rise of integrating corporate social responsibility criteria in executive compensation: Effectiveness and implications for firm outcomes. *Strat Mgmt J*, *40*(7), 1097-1122.

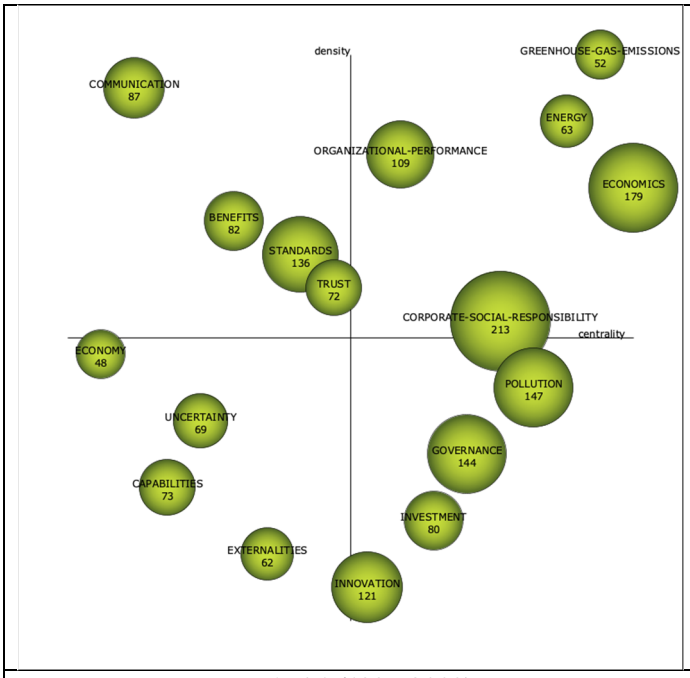
Flammer, C., Toffel, M. W., & Viswanathan, K. (2021). Shareholder activism and firms' voluntary disclosure of climate change risks. Strategic Management Journal, 42(10), 1850-1879.
Florida, R. (1996). Lean and green: the move to environmentally conscious manufacturing. *Cal M Rev*, *39*(1), 80-105.
Foucault, M. (1997/1994). The order of things: An archaology of the human sciences. New York: Vintage Books.
Fowler, S. J., & Hope, C. (2007). Incorporating sustainable business practices into company strategy. *Bus Strat & Env 16*(1), 26-38.
Freeman, R.E. (1984). Strategic Management: A Stakeholder Approach. Pitman, Boston.
Freudenreich, B., Lüdeke-Freund, F., & Schaltegger, S. (2020). A stakeholder theory perspective on business models: Value creation for sustainability. Journal of Business Ethics, 166, 3-18.
Creation for sustainability. *J Bus E,* 166(1), 3-18.
Garcia-Castro, R., & Aguilera, R. V. (2015). Incremental value creation and appropriation in a world with multiple stakeholders. *Strat Mgmt J*, *36*(1), 137-147.
Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *J Bus E,* 53(1-2), 51-71.
Gehman, J., Grimes, M. G., & Cao, K. (2019). Why we care about certified B corporations: From valuing growth to certifying values practices. Academy of Management Discoveries, 5(1), 97-101.
Giannarakis, G., Zafeiriou, E., Arabatzis, G., & Partalidou, X. (2018). Determinants of corporate climate change disclosure for European firms. *Corporate Social Responsibility and Environmental Management*, 25(3), 281-294.
Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy–A new sustainability paradigm?. *Journal of cleaner production*, 143, 757-768.
Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strat Mgmt J, 30*(4), 425-445.
Goodpaster, K. E. (1991). Business ethics and stakeholder analysis. *Bus Ethics Q*, 53-73.
Grewatsch, S., Kennedy, S., & Bansal, P. (2021). Tackling wicked problems in strategic management with systems thinking. *Strategic Organization,* 14761270211038635.
Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2010). Trade-offs in corporate sustainability: You can't have your cake and eat it. *Bus Strat and Environ, 19*(4), 217-229.
Hahn, T., Howard-Grenville, J., Lyon, T., Russo, M. V., & Walls, J. L. (2021). Leadership forum on organizations and sustainability: Taking stock, looking forward. *Org & Envir*, *34*(1), 3-17.
Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in corporate sustainability: Towards an integrative framework. *J Bus Ethics, 127*(2), 297-316.
Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. *Acad Mgmt J*, *42*(5), 479-485.
Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Bus Ethics Q*, 23(1), 97-124.
Hardin, R. (2015). Collective action. Rff Press.
Hart, S. L. (1995). A natural-resource-based view of the firm. *Acad Mgmt Rev 20*(4), 986-1014.
Hart, S. L. (1997). Beyond greening: strategies for a sustainable world. *Harvard Bus Rev*, *75*(1), 66-77.
Hawn, O., & Ioannou, I. (2016). Mind the gap: The interplay between external and internal actions in the case of corporate social responsibility. *Strat Mgmt J*, 37(13), 2569-2588.
Henisz, W. J., Dorobantu, S., & Nartey, L. J. (2014). Spinning gold: The financial returns to stakeholder engagement. *Strat Mgmt J, 35*(12), 1727-1748.
Henriques, I. (2018). Addressing wicked problems using new business models. Economic Alternatives, 4, 463-466.
Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the US chemical industry. Academy of management journal, 42(4), 351-371.
Hoffman, A. J. (2001). Linking organizational and field-level analyses: The diffusion of corporate environmental practice. *Org & Envir*, *14*(2), 133-156.
Hoffman, A. J., & Georg, S. (2012). A history of research on business and the natural environment: Conversations from the field. Business and the environment: Critical perspectives in business and management, 1, 1-58.
Hoffman, A. J., & Jennings, P. D. (2015). Institutional theory and the natural environment: Research in (and on) the Anthropocene. *Org & Envir*, *28*(1), 8-31.
Hunt, S. D., & Davis, D. F. (2012). Grounding supply chain management in resource-advantage theory: In defense of a resource-based view of the firm. *J Supp Chain Mgmt, 48*(2), 14–20
Jacob, E.K. (1994) Classification and crossdisciplinary communication: Breaching the boundaries imposed by classificatory structure. *Advances in Knowledge Organization*, 4, 101-108.

Jick, TD & Sturtevant, K (2017) Taking Stock of 30 Years of Change Management: Is it Time for a Reboot? *Res Org Chnge Dvlpt* 25:33-79, Emerald Publishing Limited.
Jizi, M. I., Salama, A., Dixon, R., & Stratling, R. (2014). Corporate governance and corporate social responsibility disclosure: Evidence from the US banking sector. *J Bus Ethics*, *125*(4), 601-615.
Jones, T. M. (1995). Instrumental stakeholder theory: A synthesis of ethics and economics. *Acad Mgmt R*, *20*(2), 404-437.
Kareiva, P. M., McNally, B. W., McCormick, S., Miller, T., & Ruckelshaus, M. (2015). Improving global environmental management with standard corporate reporting. *PNAS 112*(24), 7375-7382.
Ketchen Jr, D. J., Ireland, R. D., & Baker, L. T. (2013). The use of archival proxies in strategic management studies: castles made of sand?. Organizational research methods, 16(1), 32-42.
King, A. A., & Lenox, M. J. (2000). Industry self-regulation without sanctions: The chemical industry's responsible care program. *Acad Mgmt J,* 43(4), 698-716.
Kolk, A., & Pinkse, J. (2007). Towards strategic stakeholder management? Integrating perspectives on sustainability challenges such as corporate responses to climate change. *Corp Goverance, 7*, 370-378
Kuhlmann, M., Meuer, J., & Bening, C. R. (2023). Interorganizational Sensemaking of the Transition Toward a Circular Value Chain. Organization & Environment, 10860266231162057.
Landrum, N. E. (2018). Stages of corporate sustainability: Integrating the strong sustainability worldview. *Org & Envir*, 31(4), 287-313.
Lewis, B. W., Walls, J. L., & Dowell, G. W. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. *Strat Mgmt J,* 35(5), 712-722.
Litz, R. A. (1996). A resource-based-view of the socially responsible firm: Stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets. *J Bus Ethics*, *15*(12), 1355-1363.
Longoni, A., Luzzini, D., & Guerci, M. (2018). Deploying environmental management across functions: the relationship between green human resource management and green supply chain management. *J Bus Ethics.*, 151(4), 1081-1095.
Lyon, T. P., Delmas, M. A., Maxwell, J. W., Bansal, P., Chiroleu-Assouline, M., Crifo, P., ... & Wijen, F. (2018). CSR needs CPR: Corporate sustainability and politics. *Calif Mgmt Rev*, *60*(4), 5-24.
Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. *Org & Envir*, 28(2), 223-249.
Mair, J., Marti, I., & Ventresca, M. J. (2012). Building inclusive markets in rural Bangladesh: How intermediaries work institutional voids. *Acad Mgmt J*, 55(4), 819-850.
Majumdar, S. K., & Marcus, A. A. (2001). Rules versus discretion: The productivity consequences of flexible regulation. *Acad Mgmt. J 44*(1), 170-179.
Marcus, A., & Geffen, D. (1998). The dialectics of competency acquisition: Pollution prevention in electric generation. *Strat Mgmt J*, *19*(12), 1145-1168.
Marquis, C., Glynn, M. A., & Davis, G. F. (2007). Community isomorphism and corporate social action. *Acad Mgmt R*, 32(3), 925-945.
Martinez-Aires, M.D., Martínez-Rojas, M., López-Alonso, M. & Gago, E. J. (2014). Bibliometric mapping to analyze the evolution of research on Ergonomics using the SciMAT tool. *Occupational Safety and Hygiene II – Selected Extended and Revised Contributions from the International Symposium Occupational Safety and Hygiene, SHO 2014*, 147-151.Taylor & Francis Group, London.
Maxwell, J., Rothenberg, S., Briscoe, F., & Marcus, A. (1997). Green schemes: corporate environmental strategies and their implementation. *Calif Mgmt Rev*, *39*(3), 118-134.
McKnight, B., & Linnenluecke, M. K. (2016). How firm responses to natural disasters strengthen community resilience: A stakeholder-based perspective. *Org & Envir,* 29(3), 290-307.
McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Acad Mgmt Rev 26*(1), 117-127.
Meuer, J., Koelbel, J., & Hoffmann, V. H. (2020). On the nature of corporate sustainability. *Org & Envir,* 33(3), 319-341.
Mikkelson, G. M. (2021). Invisible hand or ecological footprint? Comparing social versus environmental impacts of recent economic growth. *Org & Envir,* 34(2), 287-297.
Minefee, I., McDonnell, M. H., & Werner, T. (2021). Reexamining investor reaction to covert corporate political activity: A replication and extension of Werner (2017). *Strat Mgmt J, 42*(6), 1139-1158.
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. *Acad Mgmt Rev*, *22*(4), 853-886.
Montero-Díaz, J., Cobo, M. J., Gutiérrez-Salcedo, M., Segado-Boj, F., & Herrera-Viedma, E. (2018). A science mapping analysis of 'Communication'WoS subject category (1980-2013). Comunicar: Revista Científica de Comunicacíon y Educacíon, 26(55), 81-91.

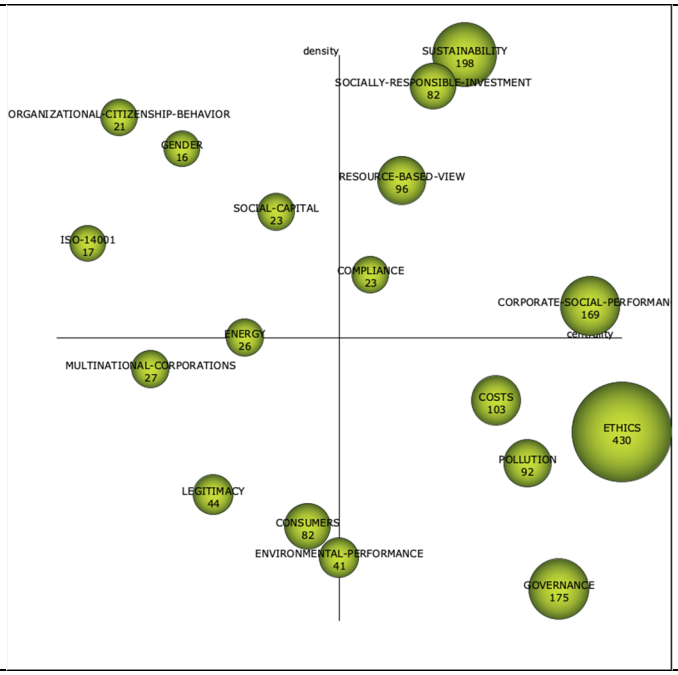
Montiel, I., & Delgado-Ceballos, J. (2014). Defining and measuring corporate sustainability: Are we there yet?. *Org & Envir,* 27(2), 113-139.
Moral-Muñoz, J. A., López-Herrera, A. G., Herrera-Viedma, E., & Cobo, M. J. (2019). Science mapping analysis software tools: A review. In *Springer Handbook of Science and Technology Indicators* (pp. 159-185). Springer, Cham.
Mueller, M., Dos Santos, V.G. & Seuring, S. (2009). The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. *J Bus Ethics, 89*(4), 509-523.
Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard Bus Rev, 87*(9), 56-64.
Nyberg, D., Ferns, G., Vachhani, S., & Wright, C. (2022). Climate Change, Business, and Society: Building Relevance in Time and Space. *Bus & Soc,* 61(5), 1322-1352.
Ocasio, W., Laamanen, T., & Vaara, E. (2018). Communication and attention dynamics: An attention-based view of strategic change. *Strat Mgmt J,* 39(1), 155-167.
Ohlan, R., Singh, R., Kaur, S., & Ohlan, A. (2022). A bibliometric analysis of first 45 years of journal of management. *Serials Rev*, 1-22.
Phillips, RA, & Reichart J. (2000). The environment as stakeholder? A fairness-based approach. *J Bus Ethics*, *23*(2), 185-197.
Pinkse, J., & Kolk, A. (2010). Challenges and trade-offs in corporate innovation for climate change. *Bus Strat & Envir*, 19(4), 261-272.
Porter, M. E., & Van der Linde, C. (1995). Toward a new conception of the environment-competitiveness relationship. *J Econ Persp, 9*(4), 97-118.
Portocarrero, F., & Burbano, V.C. (2022). Doing Well by Requiring Employees to Do Good: Field Experimental Evidence of the Effects of a One-time, Mandatory Corporate Social Intervention on Employees. Columbia University Working Paper.
Pucheta-Martínez, M. C., & Gallego-Álvarez, I. (2020). Corporate environmental disclosure practices in different national contexts: The influence of cultural dimensions. *Org & Envt*, 33(4), 597-623.
Reinhardt, F. L. (1998). Environmental product differentiation: Implications for corporate strategy. *CMR*, *40*(4), 43-73.
Rugman, A. M., & Verbeke, A. (1998). Corporate strategies and environmental regulations: An organizing framework. *Strat Mgmt J, 19*(4), 363-375.
Russo, M. V. (2001). Institutions, exchange relations, and the emergence of new fields: Regulatory policies and independent power production in America, 1978–1992. *Admin Sci Q*, 46(1), 57-86.
Russo, M. V. (2009). Explaining the impact of ISO 14001 on emission performance: a dynamic capabilities perspective on process and learning. *Bus Strat & Envir*, *18*(5), 307-319.
Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Acad Mgmt J, 40*(3), 534-559.
Salmivaara, L., & Lankoski, L. (2021). Promoting sustainable consumer behaviour through the activation of injunctive social norms: a field experiment in 19 workplace restaurants. *Org & Envir*, 34(3), 361-386.
Sarkis, J., Zhu, Q., & Lai, K. H. (2011). An organizational theoretic review of green supply chain management literature. *Intl J Prodcn Econ*, *130*(1), 1-15.
Schaltegger, S. (2002). A framework for ecopreneurship. *Greener Mgmt International, 38*, 45-58.
Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: categories and interactions. *Bus Strat & Env*, *20*(4), 222-237.
Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business cases for sustainability: A stakeholder theory perspective. *Org & Envir*, 32(3), 191-212.
Scherer, A.G. & Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. *J Mgmt. Stud, 48*(4), 899-931.
Schilke, O. (2018). A micro-institutional inquiry into resistance to environmental pressures. *Acad Mgmt J, 61*(4), 1431-1466.
Shinwell, M. and E. Shamir (2018), "Measuring the impact of businesses on people's well-being and sustainability: Taking stock of existing frameworks and initiatives", OECD Statistics Working Papers, No. 2018/08, OECD Publishing, Paris.
Shogren, J. F., & Taylor, L. O. (2020). On behavioral-environmental economics. *Rev of Envtl Econ & Pol.*
Sharma, G., & Bansal, P. (2020). Cocreating rigorous and relevant knowledge. *Acad Mgmt J 63*(2), 386-410.
Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strat Mgmt J, 19*(8), 729-753.
Shea, C. T., & Hawn, O. V. (2019). Microfoundations of corporate social responsibility and irresponsibility. *Acad Mgmt. J 62*(5), 1609-1642.
Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Acad Mgmt Rev*, *20*(4), 936-960.

Spicer, A., Wagner, M., & Zollo, M. (2021). Tinkering with the plumbing of sustainable enterprises: the case for field experimental research in corporate sustainability. *Org & Envir*, 34(3), 351-360.
Starik, M. (1995). Should trees have managerial standing? Toward stakeholder status for non-human nature. *J Bus Ethics, 14*(3), 207-217.
Starik, M., & Rands, G. P. (1995). Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Acad Mgmt Rev*, 20(4), 908-935.
Stead, W. E., & Stead, J. G. (1995). An empirical investigation of sustainability strategy implementation in industrial organizations. *Research in Corporate Social Performance and Policy, 1*(S1), 43-66.
Stephan, U., Patterson, M., Kelly, C., & Mair, J. (2016). Organizations driving positive social change: A review and an integrative framework of change processes. *J of Mgmt,* 42(5), 1250-1281.
Steelman, T. A., & Rivera, J. (2006). Voluntary environmental programs in the United States: Whose interests are served? *Org & Envir*, 19(4), 505-526.
Steurer, R. (2006). Mapping stakeholder theory anew: from the 'stakeholder theory of the firm' to three perspectives on business–society relations. *Bus Strat & Envir, 15*(1), 55-69.
Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strat Mgmt J*, *31*(5), 463-490.
Talbot, D., & Boiral, O. (2018). GHG reporting and impression management: An assessment of sustainability reports from the energy sector. *J Bus E*, 147(2), 367-383.
Tashman, P., Marano, V., & Kostova, T. (2019). Walking the walk or talking the talk? Corporate social responsibility decoupling in emerging market multinationals. *J. Intl Bus Studies* 50(2), 153-171.
Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strat Mgmt J 18*(7), 509-533.
Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *J Bus Ethics 44*(2/3), 95-105.
Vedula, S., Pacheco, D. F., Doblinger, C., Bacq, S. C., York, J., Dean, T. J., & Russo, M. V. (2021). From Fiddling to Firefighting: A Sympathetic Critique of Social and Environmental Entrepreneurship. In Academy of Management Proceedings (Vol. 2021, No. 1, p. 15118). Briarcliff Manor, NY 10510: Academy of Management.
Vogel, D. (2019). Promoting sustainable government regulation: what we can learn from California.*Org&Envir32*(2), 145-158.
Werner, T. (2017). Investor reaction to covert corporate political activity. *Strat Mgmt J*, *38*(12), 2424-2443.
Wernerfelt, B. (1984). A resource-based view of the firm. *Strat Mgmt J*, *5*(2), 171-180.
Whiteman, G., Walker, B., & Perego, P. (2013). Planetary boundaries: Ecological foundations for corporate sustainability. *J Mgmt Stud*, 50(2), 307-336.
Williams, A., & Whiteman, G. (2021). A call for deep engagement for impact: Addressing the planetary emergency. *Strat Org*.
Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *J Bus Ethics*, *119*(3), 317-328.
Xie, X., Huo, J., & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: A content analysis method. *J. Bus Research*, 101, 697-706.
York, J. G., & Venkataraman, S. (2010). The entrepreneur–environment nexus: Uncertainty, innovation, and allocation. *J Bus Venturing* , 25(5), 449-463.
Zhu, Q., Sarkis, J., & Lai, K. H. (2013). Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *J Purchasing & Supply Mgmt, 19*(2), 106-117.

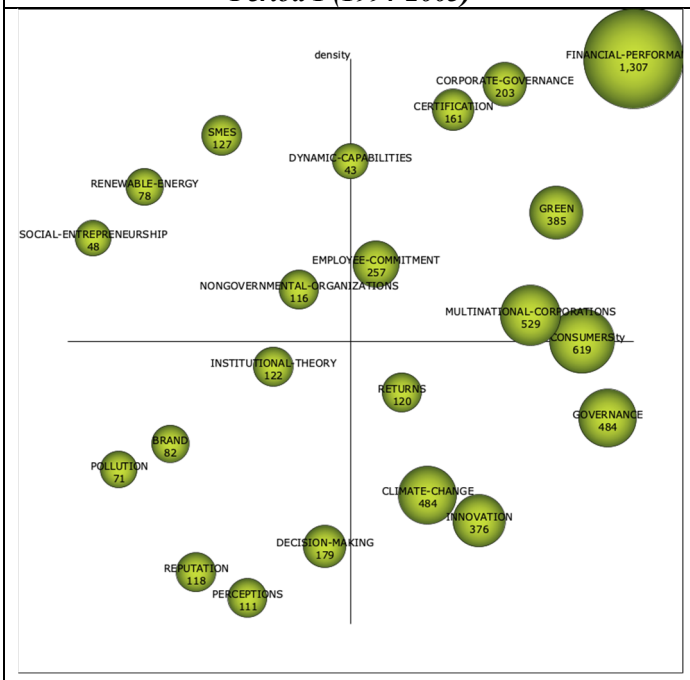
Figure 1: SciMAT-generated strategic diagrams ("maps")



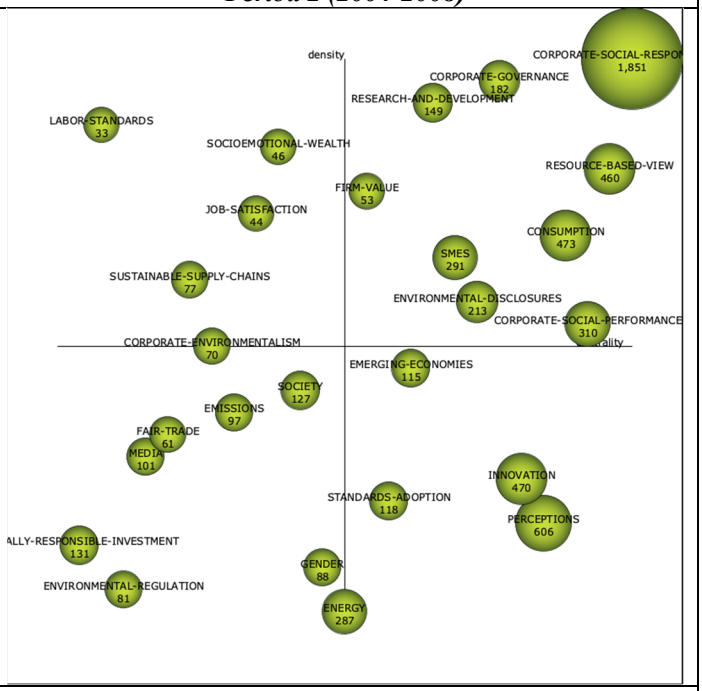
Period 1 (1994-2003)



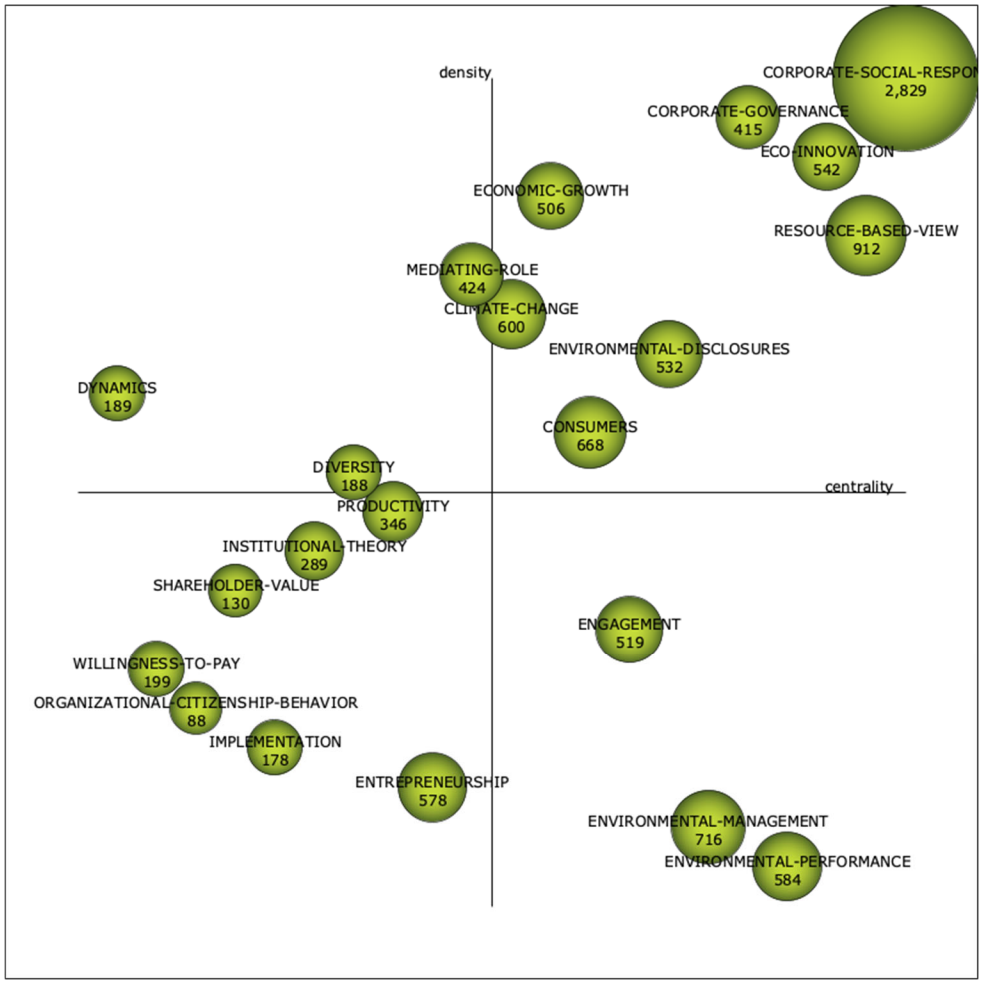
Period 2 (2004-2008)



Period 3 (2009-2013)



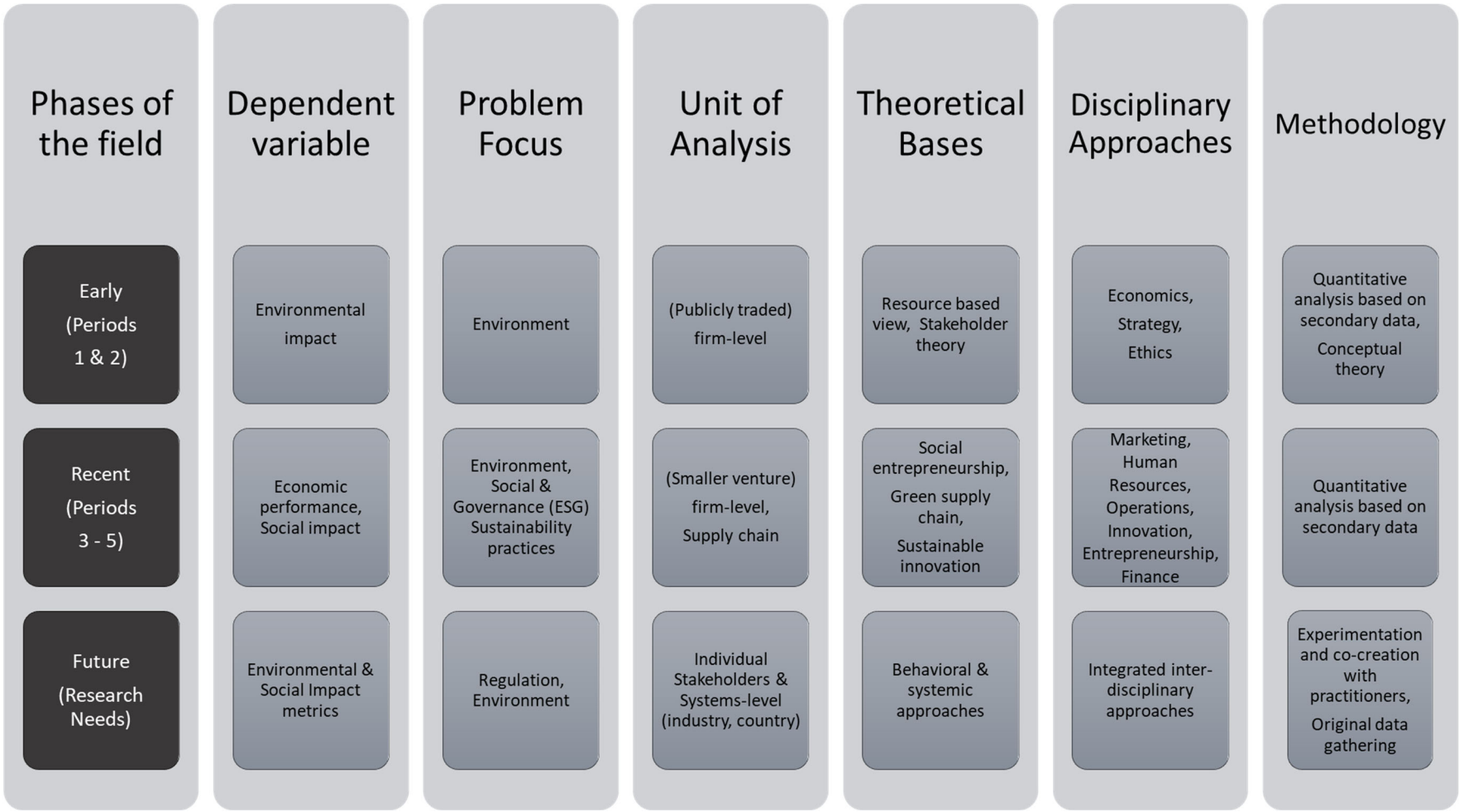
Period 4 (2014-2017)



Period 5 (2018-2021)

Note: As a reference, the motor themes (URH quadrant) are (Period 1) Energy, Green Gas Emissions, CSR, Organizational Performance, Economics; (Period 2) Corporate Social Performance, Resource-based View. **(**Period 3): Certification, Multinational Corporations, Corporate Governance, Green, Consumers, Financial Performance, Employee Commitment, Dynamic Capabilities; (Period 4): Corporate Governance, R&D, Environmental Disclosures, CSR, SMEs, Corporate Social Performance, Firm Value, Consumption, Resource-based-view. Period 5): Mediating role, Climate Change, Economic Growth, Environmental Disclosures, Consumes, Corporate Governance, Eco-Innovation, Resource-Based View, Corporate Social Responsibility.

Figure 2. Summary of the evolution of the field & opportunities for future research



APPENDICES

Appendix 1a. Survey Instructions & Details

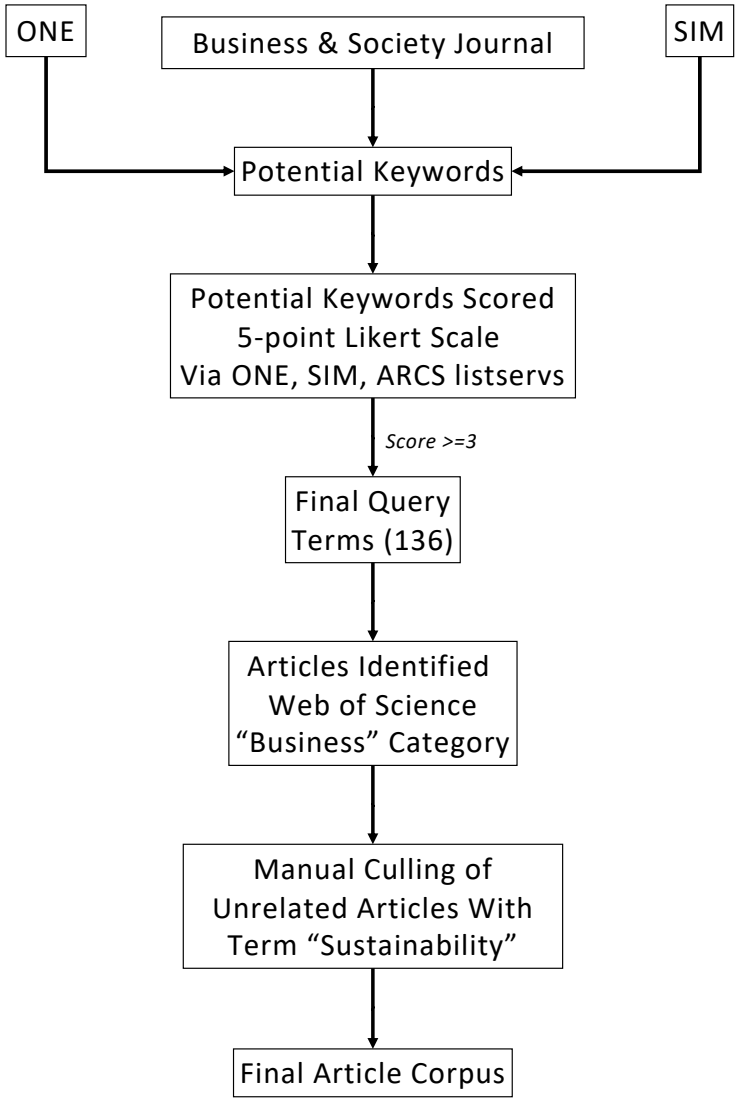
The survey instructions explained, "We will be using a list of keywords to identify academic articles in management that are related to corporate social responsibility (including business and the environment and/or sustainability), and would appreciate your input on the appropriate keywords. The survey will take no more than 5-10 minutes to complete and is anonymous. As a study participant, you are entitled to know the following: your participation is voluntary; your answers are confidential; there are no right or wrong answers. For any questions regarding the survey or the research being conducted, please contact {email of corresponding author}. Thank you very much for your time. Sincerely, {names of authors}."

The key question asked was, "Please indicate how much you agree with this statement for each of the keywords listed below. 'This keyword will identify papers related to the field of corporate social responsibility (including business & the environment and/or sustainability,' (1=strongly agree, 2=agree, 3=neither agree nor disagree, 4=disagree, 5=strongly disagree). We received 37 responses to the survey. From the initial list, we kept all terms with mean survey responses less than 3. This resulted in excluding the following words which received mean scores equal to or above 3: work life, gender, race, economic development, employee silence, 33/50 program, crime, command and control regulations, ethnicity, political behavior, feminist perspectives, employee mobility, social comparison, political capabilities, political strategy, women, market instruments, hurricane Katrina, political networking, female, sex composition, grants, political connections, family conflict, sex.

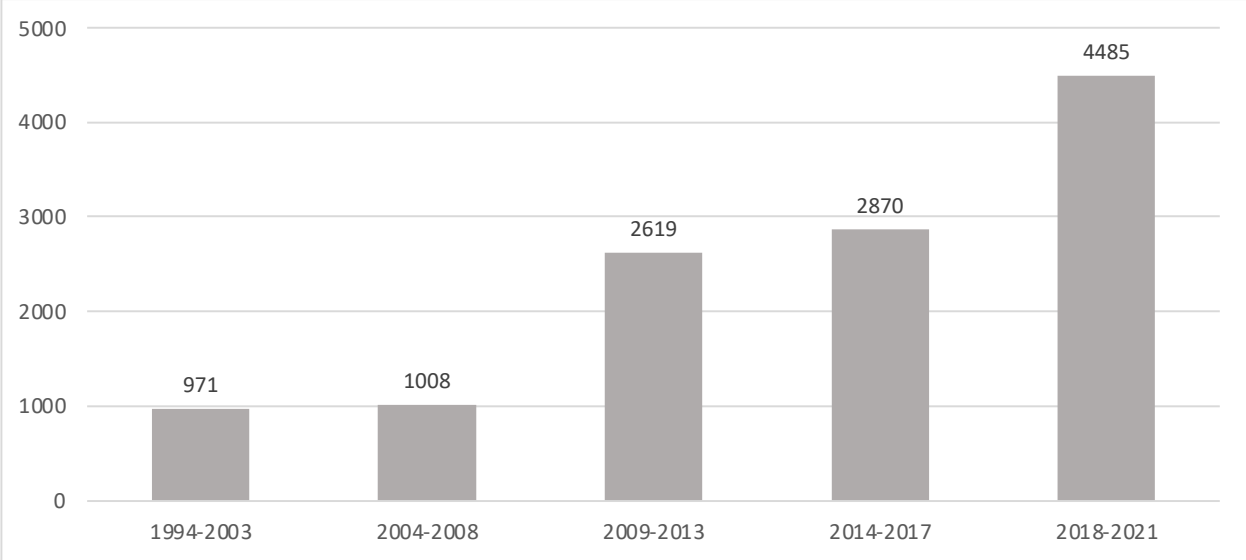
Appendix 1b: Query Terms

TS = ("alternative energy" OR "alternative energies" OR "business and environment" OR "climate change" OR "corporate social performance" OR "corporate social responsibility" OR "CSP" OR "CSR" OR "domini social 400 index" OR "DS400" OR "ecolabel" OR "ecolabels" OR "eco-label" OR "eco-labels" OR "ecology" OR "ecological" OR "ecosystem" OR "ecosystems" OR "energy" OR "energies" OR "environment" OR "environment and strategy" OR "environment and trade" OR "environmental social performance" OR "ESP" OR "environmental agreements" OR "environmental agreement" OR "environmental assessment" OR "environmental assessments" OR "environmental attitudes" OR "environmental attitude" OR "environmental behavior" OR "environmental behaviors" OR "environmental capabilities" OR "environmental capability" OR "environmental communication" OR "environmental communications" OR "environmental concern" OR "environmental concerns" OR "environmental disclosures" OR "environmental disclosure" OR "environmental economics" OR "environmental entrepreneurship" OR "environmental ethics" OR "environmental initiatives" OR "environmental initiative" OR "environmental innovation" OR "environmental innovations" OR "environmental investments" OR "environmental investment" OR "environmental issues" OR "environmental issue" OR "environmental justice and ethics" OR "environmental justice" OR "environmental ethics" OR "environmental litigation" OR "environmental management" OR "environmental partnerships" OR "environmental partnership" OR "environmental perception" OR "environmental perceptions" OR "environmental performance" OR "environmental policy" OR "environmental policies" OR "environmental proactivity" OR "environmental programs" OR "environmental program" OR "environmental protection" OR "environmental protections" OR "environmental regulation" OR "environmental regulations" OR "environmental reporting" OR "environmental risk management" OR "environmental strategy" OR "environmental strategies" OR "environmental supply chain management" OR "environmental sustainability" OR "environmental technology" OR "environmental technologies" OR "environmental voluntary agreements" OR "environmental voluntary agreement" OR "environmentalism" OR "ESG" OR "fossil fuels" OR "fossil fuel" OR "green" OR "ISO 14001" OR "KLD" OR "Kinder Lyndenberg Domini" OR "natural disasters" OR "natural disaster" OR "natural environment" OR "natural environments" OR "pollution" OR "renewable energy" OR "renewable energies" OR "resource based view sustainability" OR "RBV sustainability" OR "right to know" OR "right-to-know" OR "shareholder activism" OR "shareholder activist" OR "social responsible investments" OR "SRI" OR "socially responsible investing" OR "socially responsible investor" OR "socially responsible firm" OR "socially responsible firms" OR "socially responsible investing" OR "sustainability" OR "sustainable" OR "toxic release inventory" OR "toxic release inventories" OR "triple bottom line" OR "triple-bottom-line" OR "wind power".

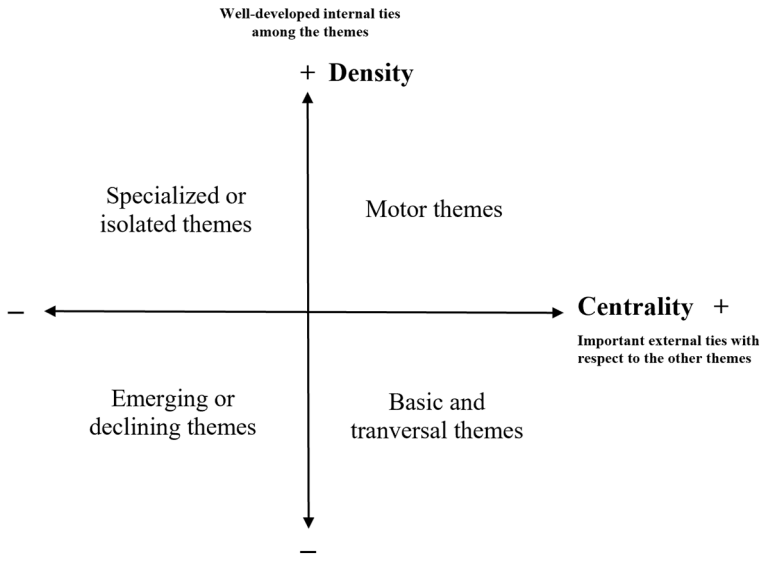
Appendix 2: Visualization of Process Resulting in Final Query Terms



Appendix 3. Corporate Sustainability-related Articles, by Time Period



Appendix 4. Quadrants in a Strategic Diagram

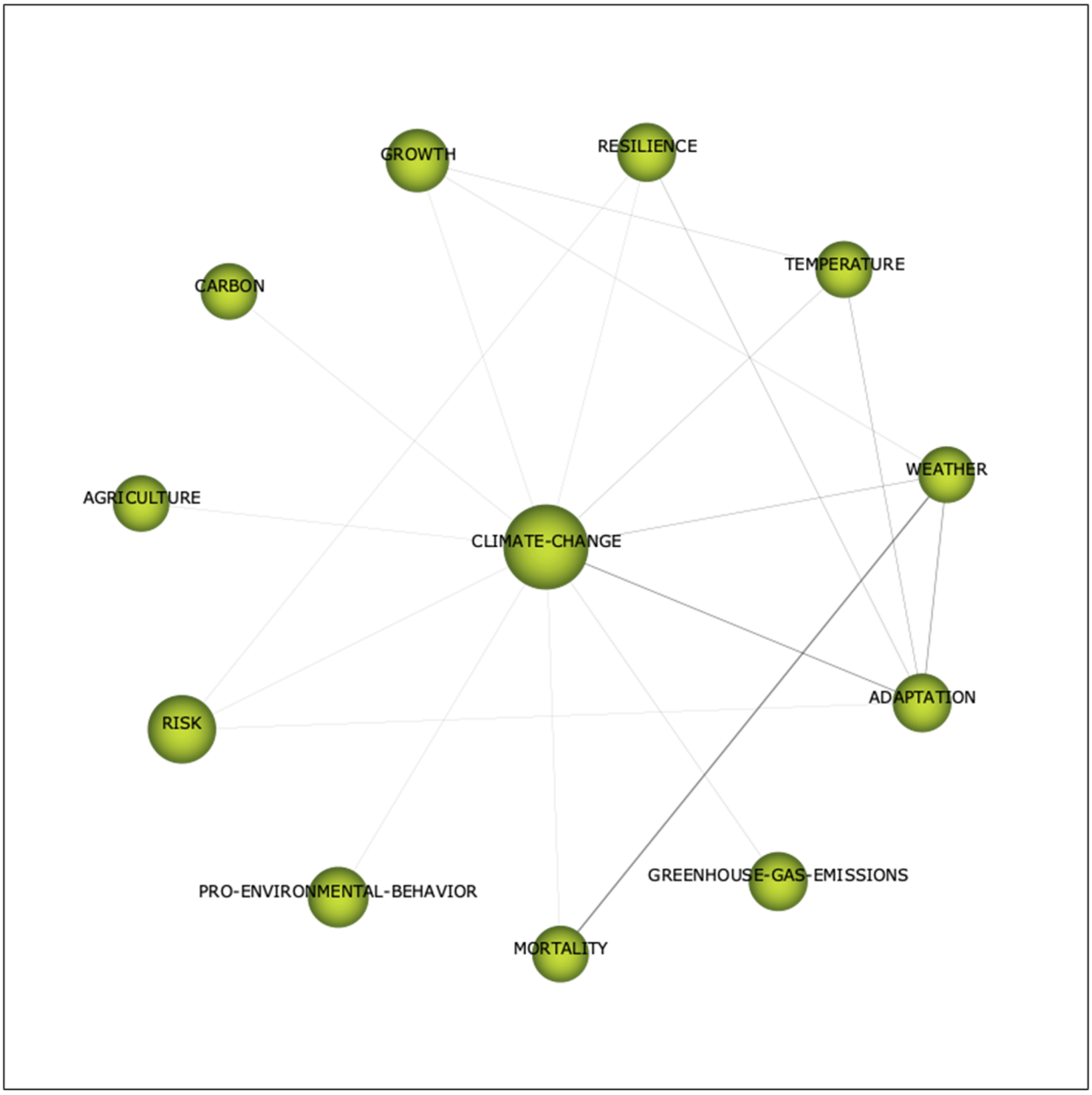


Notes: Motor themes are well-developed and important for the structure of the research field; Specialized or peripheral themes are well-developed but not highly relevant for the structure of the field; Emerging or disappearing themes - both weakly developed and marginal; Basic or transversal themes are important for the research field, although not mature.

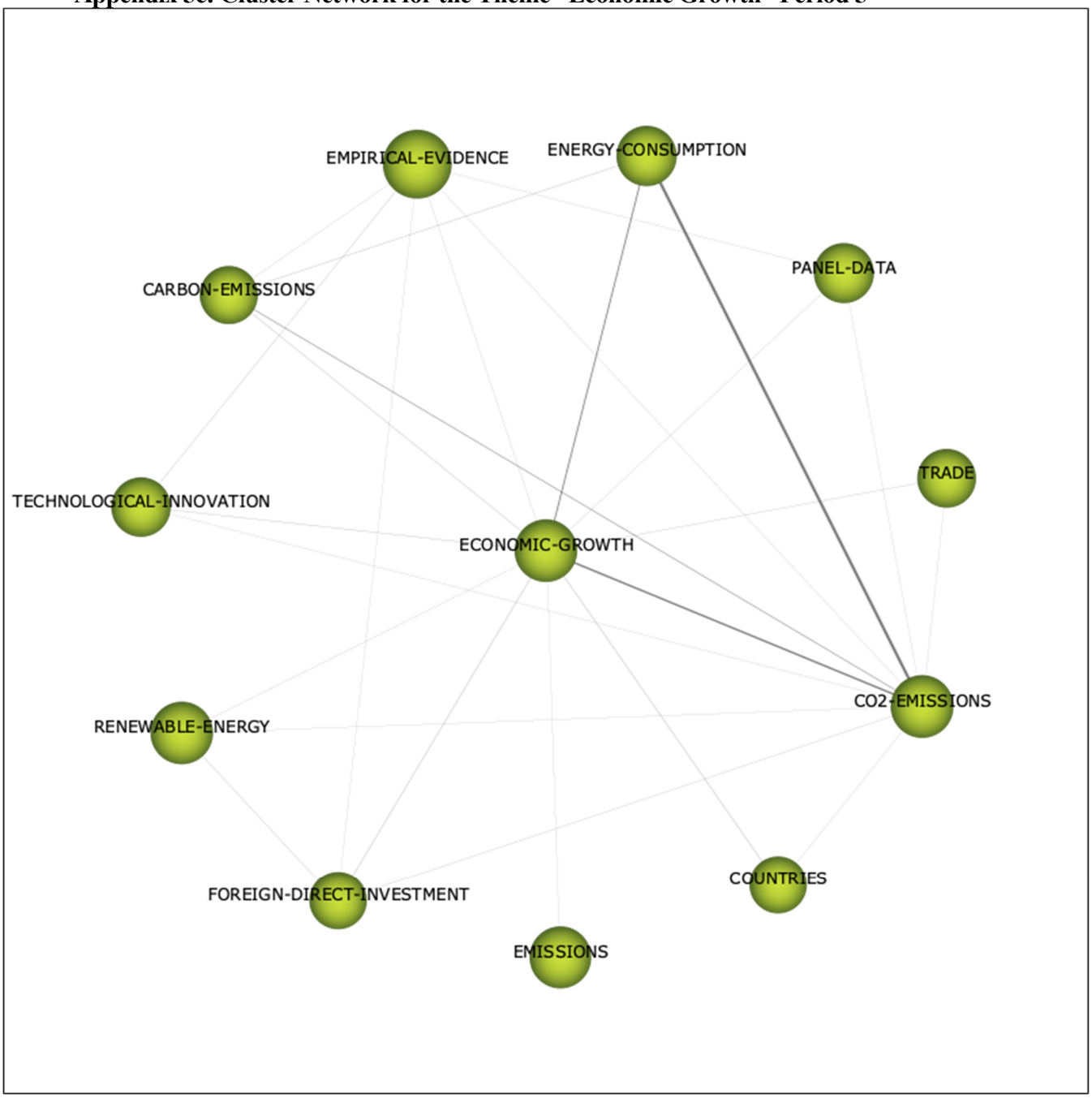
Appendix 5a: Cluster Network for the Theme "Sustainability" Period 2

Note: Cluster network for *Sustainability* motor theme in period 2 (2004-2008) showing its associated sub-themes.

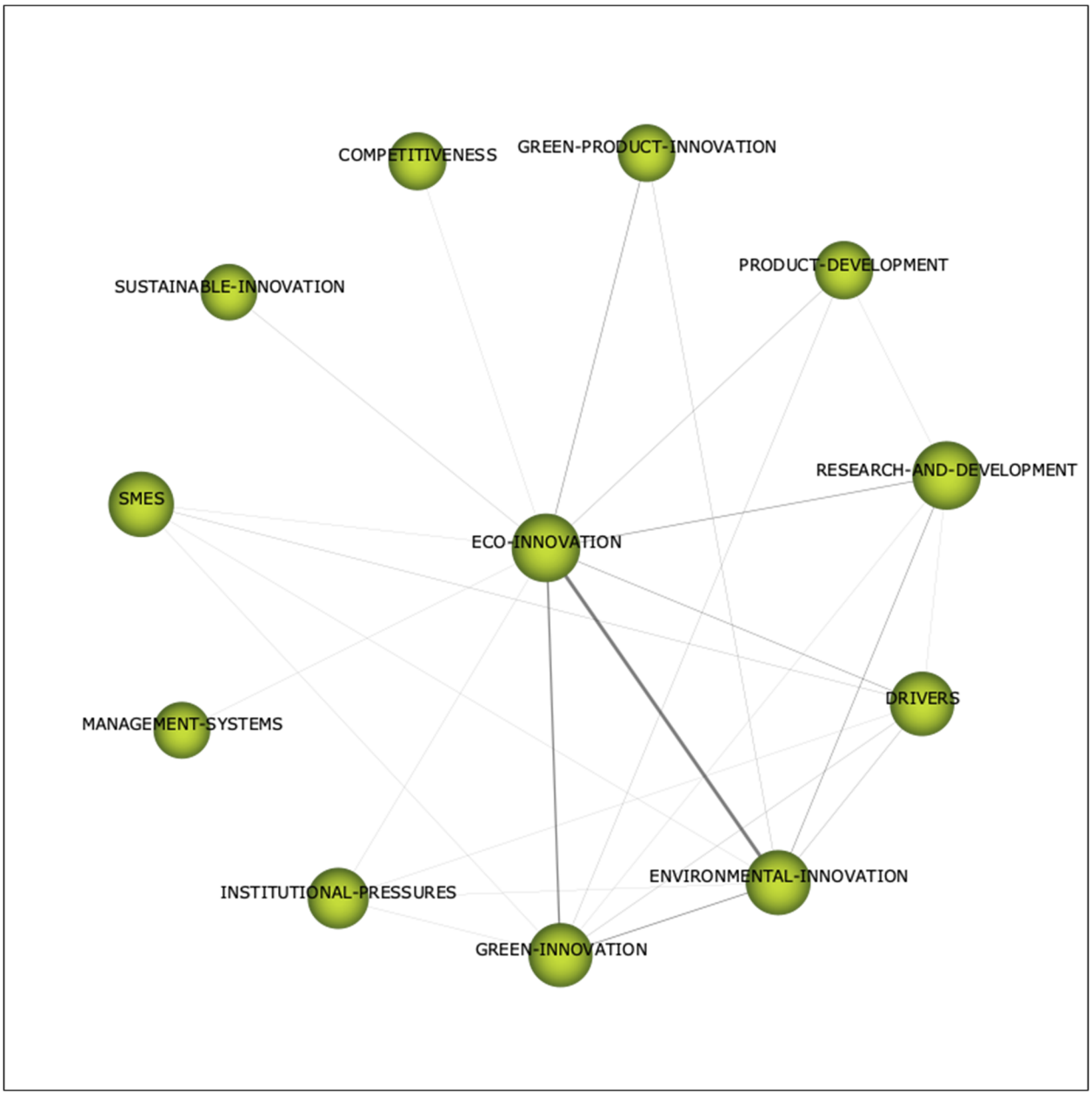
Appendix 5b: Cluster Network for the Theme "Climate Change" Period 5



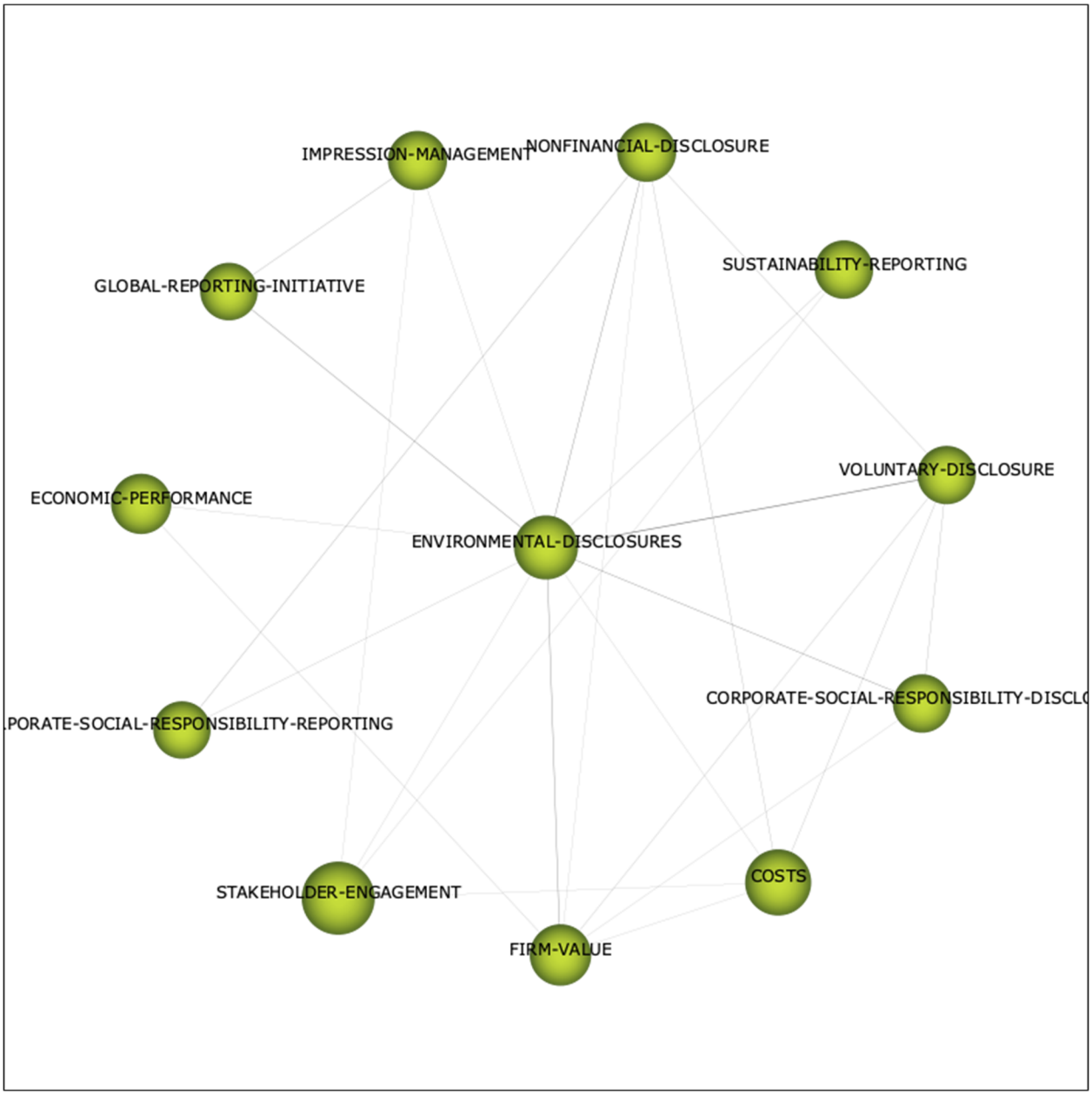
Appendix 5c: Cluster Network for the Theme "Economic Growth" Period 5



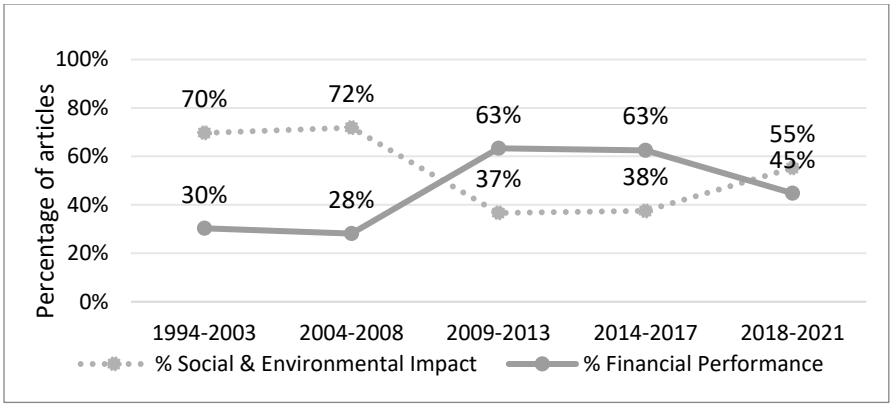
Appendix 5d: Cluster Network for the Theme "Eco-Innovation" Period 5



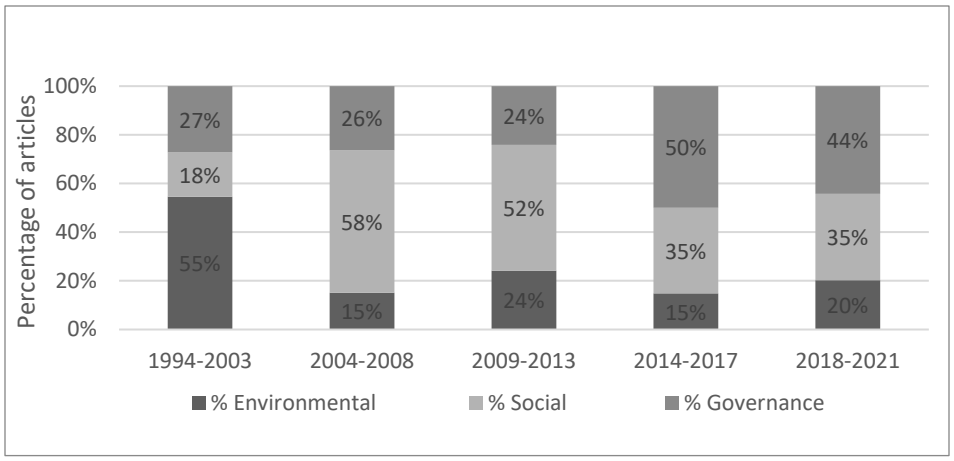
Appendix 5e: Cluster Network for the Theme "Environmental Disclosures" Period 5



Appendix 6a. Dependent variables of focus: Social impact versus financial performance



Appendix 6b ESG Factors



Appendix 6c. Unit of Analysis

	1994-2003	2004-2008	2009-2013	2014-2017	2018-2021
Individual (Consumer/ Household)	8%	4%	16%	18%	8%
Firm	66%	71%	49%	53%	76%
Industry	6%	4%	0%	3%	0%
Business Unit	0%	0%	0%	2%	0%
Facility (Factory/Plant)	4%	6%	3%	0%	0%
Country	4%	2%	1%	0%	8%
Community	2%	0%	0%	1%	0%

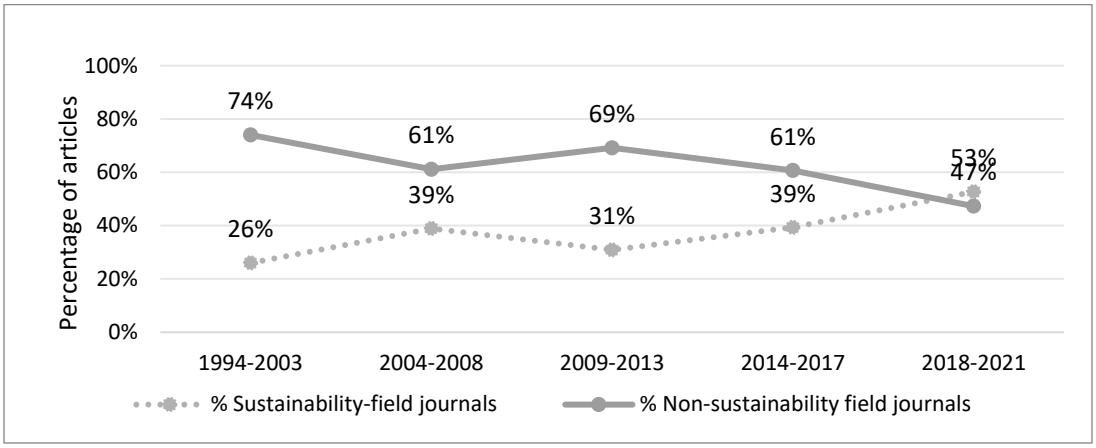
Article (Literature Review)	10%	10%	30%	20%	9%
Regulation (Standards/Ecolabel/Practice)	0%	2%	1%	2%	0%
	100%	**100%**	**100%**	**100%**	**100%**

Appendix 6d. Journal field classification of articles

	1994-2003	2004-2008	2009-2013	2014-2017	2018-2021
General & Strategy	60%	46%	48%	36%	22%
Economics	24%	14%	1%	2%	5%
Marketing	10%	6%	16%	14%	12%
Innovation	4%	0%	0%	5%	25%
OS/OB,HRM/IR	2%	28%	29%	28%	33%
International Business	0%	4%	5%	2%	0%
Entrepreneurship	0%	2%	1%	3%	1%
OR,MS,POM	0%	0%	0%	9%	1%
	100%	**100%**	**100%**	**100%**	**100%**

Notes: Based on Harzing's Journal Quality List: General & Strategy; Economics; Marketing; Innovation; Organization Studies/Behavior, Human Resource Management, Industrial Relations; International Business (OS/OB, HRM/IR); Entrepreneurship; Operations Research, Management Science, Production & Operations Management (OR, MS, POM)

Appendix Figure 6e. Sustainability & non-sustainability journals field classification



Notes: Sustainability-field journals includes Journal of Environmental Economics and Management, Journal of Business Ethics, Business Ethics: A European Review, Corporate Governance: An International Review, Business Strategy and The Environment, Corporate Social Responsibility and Environmental Management, Business Ethics Quarterly, and Business & Society.

Appendix 6f. Primary Methodology

	1994-2003	2004-2008	2009-2013	2014-2017	2018-2021
Experimental	6%	0%	4%	1%	0%
Quantitative – secondary data	36%	32%	15%	40%	59%
Quantitative – survey data	20%	10%	23%	13%	23%
Theory/conceptual	18%	24%	29%	23%	6%
Qualitative	10%	22%	6%	8%	4%
Review paper	10%	12%	24%	14%	9%
	100%	**100%**	**100%**	**100%**	**100%**

Appendix 7: List of top 10 articles from each of the motor themes

(10 most-cited articles for each of the 35 MTs, by time period. MT's indicated in capital letters)

Period 1994-2003

- GREENHOUSE-GAS-EMISSIONS

Walley, N. & Whitehead, B. (1994). Its not easy being green. *Harvard Business Review*, 72(3), 46.

Hamilton, J.T. (1995). Pollution as news - media and stock-market reactions to the toxics release inventory data. Journal of Environmental Economics and Management, 28(1), 98-113.

Brunnermeier, Sb. & Cohen, Ma. (2003). Determinants of environmental innovation in us manufacturing industries. *Journal of Environmental Economics and Management*, 45(2), 278-293.

Cole, Ma. & Elliott, R.J.T. (2003). Determining the trade-environment composition effect: the role of capital, labor and environmental regulations. *Journal of Environmental Economics and Management*, 46(3), 363-383.

Coggins, J.S. & Swinton, J.R. (1996). The price of pollution: a dual approach to valuing so2 allowances. *Journal of Environmental Economics and Management*, 30(1), 58-72.

Lopez, R. & Mitra, S. (2000). Corruption, pollution, and the kuznets environment curve. *Journal of Environmental Economics and Management*, 40(2), 137-150.

Dasgupta, S., Laplante, B. & Mamingi, N. (2001). Pollution and capital markets in developing countries. *Journal of Environmental Economics and Management*, 42(3), 310-335.

Ulph, A. (1996). Environmental policy and international trade when governments and producers act strategically. *Journal of Environmental Economics and Management*, 30(3), 265-281.

Brooks, N. & Sethi, R. (1997). The distribution of pollution: community characteristics and exposure to air toxics. *Journal of Environmental Economics and Management*, 32(2), 233-250.

Gray, W.B. & Shadbegian, R.J. (2003). Plant vintage, technology, and environmental regulation. *Journal of Environmental Economics and Management*, 46(3), 384-402.

- ENERGY

Thierry, M., Salomon, M., Vannunen, J. & Vanwassenhove, L. (1995). Strategic issues in product recovery management. *California Management Review*, 37(2), 114-135.

Tanner, C. & Kast, S.W. (2003). Promotine sustainable consumption: determinants of green purchases by swiss consumers. *Psychology & Marketing*, 20(10), 883-902.
Lopez, R. (1994). The environment as a factor of production - the effects of economic-growth and trade liberalization. *Journal of Environmental Economics and Management*, 27(2), 163-184.
Osterhuis, T.L. (1997). Pro-social consumer influence strategies: when and how do they work?. *Journal of Marketing*, 61(4), 16-29.
Kennedy, P.W. (1994). Equilibrium pollution taxes in open economies with imperfect competition. *Journal of Environmental Economics and Management*, 27(1), 49-63.
Bang, H.K., Ellinger, A.E., Hadjimarcou, J. & Traichal, P.A. (2000). Consumer concern, knowledge, belief, and attitude toward renewable energy: an application of the reasoned action theory. *Psychology & Marketing*, 17(6), 449-468.
Noci, G. & Verganti, R. (1999). Managing 'green' product innovation in small firms. *R&D Management*, 29(1), 3-15.
Norberg-bohm, V. (2000). Creating incentives for environmentally enhancing technological change: lessons from 30 years of us energy technology policy. *Technological Forecasting and Social Change*, 65(2), 125-148.
Bohringer, C. & Rutherford, T.F. (1997). Carbon taxes with exemptions in an open economy: a general equilibrium analysis of the german tax initiative. *Journal of Environmental Economics and Management*, 32(2), 189-203.
Rondinelli, D.A. & Vastag, G. (1996). International environmental standards and corporate policies: an integrative framework. *California Management Review*, 39(1), 106.

- ORGANIZATIONAL-PERFORMANCE

Hart, S.L. (1995). A natural-resource-based view of the firm. Academy of Management Review, 20(4),986-1014.
Russo, Mv. & Fouts, P.A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559.
Brown, T.J. & Dacin, P.A. (1997). The company and the product: corporate associations and consumer product responses. *Journal of Marketing*, 61(1), 68-84.
Mcwilliams, A. & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification?. *Strategic Management Journal*, 21(5), 603-609.
Turban, D.B. & Greening, D.W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40(3), 658-672.
Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: the role of complementary assets. *Academy of Management Journal*, 43(4), 663-680.
Park, S.H. & Luo, Y.D. (2001). Guanxi and organizational dynamics: organizational networking in chinese firms. *Strategic Management Journal*, 22(5), 455-477.
Porter, M.E. & Kramer, M.R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56.
Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal*, 43(4), 681-697.
Aragon-correa, J.A. & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28(1), 71-88.

- ECONOMICS

Sharma, S. & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729-753.
Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: the role of complementary assets. *Academy of Management Journal*, 43(4), 663-680.
Porter, M.E. & Kramer, M.R. (2002). The competitive advantage of corporate philanthropy. *Harvard Business Review*, 80(12), 56.
Elkington, J. (1994). Towards the sustainable corporation - win-win-win business strategies for sustainable development. *California Management Review*, 36(2), 90-100.
Thierry, M., Salomon, M., Vannunen, J. & Vanwassenhove, L. (1995). Strategic issues in product recovery management. *California Management Review*, 37(2), 114-135.

Gladwin, T.R., Kennelly, J.J. & Krause, T.S. (1995). Shifting paradigms for sustainable development - implications for management theory and research. *Academy of Management Review*, 20(4), 874-907.
Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20(4), 936-960.
Van Marrewijk, M. (2003). Concepts and definitions of CSR and corporate sustainability: between agency and communion. *Journal of Business Ethics*, 44(2), 95-105.
Hart, S.L. (1997). Beyond greening: strategies for a sustainable world. *Harvard Business Review*, 75(1), 66.
Walley, N. & Whitehead, B. (1994). Its not easy being green. *Harvard Business Review*, 72(3),46.

- CORPORATE-SOCIAL-RESPONSIBILITY

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.
Clarkson, M.B.E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92-117.
Mcwilliams, A. & Siegel, D. (2001). Corporate social responsibility: a theory of the firm perspective. *Academy of Management Review*, 26(1), 117-127.
Waddock, S.A. & Graves, S.B. (1997). The corporate social performance - financial performance link. *Strategic Management Journal*, 18(4), 303-319.
Margolis, J.D. & Walsh, J.P. (2003). Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268-305.
Russo, M.V. & Fouts, P.A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534-559.
Sen, S. & Bhattacharya, C.B. (2001). Does doing good always lead to doing better? consumer reactions to corporate social responsibility. *Journal of Marketing research*, 38(2), 225-243.
Mcwilliams, A. & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification?. *Strategic Management Journal*, 21(5), 603-609.
Turban, D.B. & Greening, D.W. (1997). Corporate social performance and organizational attractiveness to prospective employees. *Academy of Management Journal*, 40(3), 658-672.
Christmann, P. (2000). Effects of "best practices" of environmental management on cost advantage: the role of complementary assets. *Academy of Management Journal*, 43(4), 663-680.

Period 2004-2008

- SUSTAINABILITY

Porter, M.E. & Kramer, M.R. (2006). Strategy and society. *Harvard Business Review*, 84(12, 78.
Garriga, E. & Mele, D.N. (2004). Corporate social responsibility theories: mapping the territory. *Journal of Business Ethics*, 53(1-2), 51-71.
Bansal, P. (2005). Evolving sustainably: a longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
London, T. & Hart, S.L. (2004). Reinventing strategies for emerging markets: beyond the transnational model. *Journal of International Business Studies*, 35(5), 350-370.
Sharma, S. & Henriques, I. (2005). Stakeholder influences on sustainability practices in the canadian forest products industry. *Strategic Management Journal*, 26(2), 159-180.
Fischer, C. & Newell, R.G. (2008). Environmental and technology policies for climate mitigation. *Journal of Environmental Economics and Management*, 55(2), 142-162.
Christmann, P. (2004). Multinational companies and the natural environment: determinants of global environmental policy standardization. *Academy of Management Journal*, 47(5), 747-760.
Chen, Y.S., Lai, S.B. & Wen, C.T. (2006). The influence of green innovation performance on corporate advantage in taiwan. *Journal of Business Ethics*, 67(4), 331-339.
Cohen, B. & Winn, M.I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1), 29-49.

Hull, C.E. & Rothenberg, S. (2008). Firm performance: the interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal*, 29(7), 781-789.

- RESOURCE-BASED-VIEW

Garriga, E. & Mele, D.N. (2004). Corporate social responsibility theories: mapping the territory. *Journal of Business Ethics*, 53(1-2, 51-71.
Bansal, P. (2005). Evolving sustainably: a longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
Scherer, A.G. & Palazzo, G. (2007). Toward a political conception of corporate responsibility: business and society seen from a habermasian perspective. *Academy of Management Review*, 32(4), 1096-1120.
London, T. & Hart, S.L. (2004). Reinventing strategies for emerging markets: beyond the transnational model. *Journal of International Business Studies*, 35(5), 350-370.
Barnett, M.L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review*, 32(3), 794-816.
Basu, K. & Palazzo, G. (2008). Corporate social responsibility: a process model of sensemaking. *Academy of Management Review*, 33(1), 122-136.
Doh, J.P. & Guay, T.R. (2006). Corporate social responsibility, public policy, and ngo activism in Europe and the United States: an institutional-stakeholder perspective. *Journal of Management Studies*, 43(1), 47-73.
Branco, M.C. & Rodrigues, L.L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, 69(2), 111-132.
Barnett, M.L. & Salomon, R.M. (2006). Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27(11), 1101-1122.
Chen, Y.S., Lai, S.B. & Wen, C.T. (2006). The influence of green innovation performance on corporate advantage in taiwan. *Journal of Business Ethics*, 67(4), 331-339.

- SOCIALLY-RESPONSIBLE-INVESTMENT

Barnett, M.L. & Salomon, R.M. (2006). Beyond dichotomy: the curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal*, 27(11), 1101-1122.
Brammer, S.J. & Pavelin, S. (2006). Corporate reputation and social performance: the importance of fit. *Journal of Management Studies*, 43(3), 435-455.
Sparkes, R. & Cowton, C.J. (2004). The maturing of socially responsible investment: a review of the developing link with corporate social responsibility. *Journal of Business Ethics*, 52(1), 45-57.
Van Beurden, P. & Gossling, T. (2008). The worth of values - a literature review on the relation between corporate social and financial performance. *Journal of Business Ethics*, 82(2), 407-424.
Sharfman, M.P. & Fernando, C.S. (2008). Environmental risk management and the cost of capital. *Strategic Management Journal*, 29(6), 569-592.
David, P., Bloom, M. & Hillman, A.J. (2007). Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28(1), 91-100.
Vogel, D.J. (2005). Is there a market for virtue? the business case for corporate social responsibility. *California Management Review*, 47(4), 19.
Lopez, M.V., Garcia, A. & Rodriguez, L. (2007). Sustainable development and corporate performance: a study based on the dow jones sustainability index. *Journal of Business Ethics*, 75(3),285-300.138
Guay, T., Doh, J.P. & Sinclair, G. (2004). Non-governmental organizations, shareholder activism, and socially responsible investments: ethical, strategic, and governance implications. *Journal of Business Ethics*, 52(1), 125-139.
Neubaum, D.O. & Zahra, S.A. (2006). Institutional ownership and corporate social performance: the moderating effects of investment horizon, activism, and coordination. *Journal of Management*, 32(1), 108-131

- COMPLIANCE

Barla, P. (2007). Iso 14001 certification and environmental performance in Quebec's pulp and paper industry. *Journal of Environmental Economics and Management*, 53(3), 291-306.
Mamic, I. (2005). Managing global supply chain: the sports footwear, apparel and retail sectors. *Journal of Business Ethics*, 59(1-2), 81-100.
Shimshack, J.P. & Ward, M.B. (2005). Regulator reputation, enforcement, and environmental compliance. *Journal of Environmental Economics and Management*, 50(3), 519-540.
Tencati, A., Perrini, F. & Pogutz, S. (2004). New tools to foster corporate socially responsible behavior. *Journal of Business Ethics*, 53(1-2), 173-190.
Wang, H. & Wheeler, D. (2005). Financial incentives and endogenous enforcement in China's pollution levy system. *Journal of Environmental Economics and Management*, 49(1), 174-196.
Earnhart, D. (2004). Regulatory factors shaping environmental performance at publicly-owned treatment plants. *Journal of Environmental Economics and Management*, 48(1), 655-681.
Hassink, H., de Vries, M. & Bollen, L. (2007). A content analysis of whistleblowing policies of leading European companies. *Journal of Business Ethics*, 75(1), 25-44.
Williams, G. & Zinkin, J. (2008). The effect of culture on consumers' willingness to punish irresponsible corporate behaviour: applying hofstede's typology to the punishment aspect of corporate social responsibility. Business Ethics-a European Review, 17(2), 210-226.
Shimshack, J.P. & Ward, M.B. (2008). Enforcement and over-compliance. Journal of Environmental Economics and Management, 55(1), 90-105.
Macho-Stadler, I. & Perez-Castrillo, D. (2006). Optimal enforcement policy and firms' emissions and compliance with environmental taxes. Journal of Environmental Economics and Management, 51(1), 110-131.

- CORPORATE-SOCIAL-PERFORMANCE

Campbell, J.L. (2007). Why would corporations behave in socially responsible ways? an institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3), 946-967.
Garriga, E. & Mele, D.N. (2004). Corporate social responsibility theories: mapping the territory. Journal of Business Ethics, 53(1-2), 51-71.
Aguilera, R.V., Rupp, D.E., Williams, C.A. & Ganapathi, I. (2007). Putting the s back in corporate social responsibility: a multilevel theory of social change in organizations. *Academy of Management Review*, 32(3), 836-863.
Luo, X.M. & Bhattacharya, C.B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70(4), 1-18.
Bansal, P. (2005). Evolving sustainably: a longitudinal study of corporate sustainable development. *Strategic Management Journal*, 26(3), 197-218.
Trevino, L.K., Weaver, G.R. & Reynolds, S.J. (2006). Behavioral ethics in organizations: a review. *Journal of Management*, 32(6), 951-990.
Scherer, A.G. & Palazzo, G. (2007). Toward a political conception of corporate responsibility: business and society seen from a habermasian perspective. *Academy of Management Review*, 32(4), 1096-1120.
Becker-olsen, K.L., Cudmore, B.A. & Hill, R.P. (2006). The impact of perceived corporate social responsibility on consumer behavior. *Journal of Business Research*, 59(1), 46-53.
Maignan, I. & Ferrell, O.C. (2004). Corporate social responsibility and marketing: an integrative framework. *Journal of the Academy of Marketing Science*, 32(1), 3-19.
Doh, J.P. & Guay, T.R. (2006). Corporate social responsibility, public policy, and NGO activism in Europe and the United States: an institutional-stakeholder perspective. *Journal of Management Studies*, 43(1), 47-73.

Period 2009-2013

- FINANCIAL-PERFORMANCE

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.

Scherer, Ag. & Palazzo, G. (2011). The new political role of business in a globalized world: a review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, 48(4), 899-931.
Godfrey, P.C., Merrill, C.B. & Hansen, Jm. (2009). The relationship between corporate social responsibility and shareholder value: an empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425-445.
Surroca, J., Tribo, Ja. & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal*, 31(5), 463-490.
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.
Wood, D.J. (2010). Measuring corporate social performance: a review. *International Journal of Management Reviews*, 12(1), 50-84.
Turker, D. (2009). Measuring corporate social responsibility: a scale development study. *Journal of Business Ethics*, 85(4), 411-427.
Wagner, T., Lutz, R.J. & Weitz, B.A. (2009). Corporate hypocrisy: overcoming the threat of inconsistent corporate social responsibility perceptions. *Journal of Marketing*, 73(6), 77-91. 229
Bhattacharya, C.B., Korschun, D. & Sen, S. (2009). Strengthening stakeholder-company relationships through mutually beneficial corporate social responsibility initiatives. *Journal of Business Ethics*, 85, 257-272. 227
Gold, S., Seuring, S. & Beske, P. (2010). Sustainable supply chain management and inter-organizational resources: a literature review. *Corporate Social Responsibility and Environmental Management*, 17(4), 230-245.

- CORPORATE-GOVERNANCE

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.
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., Cruz, C. & Gomez-Mejia, Lr. (2012). Socioemotional wealth in family firms: theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279.
Terjesen, S., Sealy, R. & Singh, V. (2009). Women directors on corporate boards: a review and research agenda. *Corporate governance-an international review*, 17(3), 320-337.
Wood, D.J. (2010). Measuring corporate social performance: a review. *International Journal of Management Reviews*, 12(1), 50-84.
Reid, E.M. & Toffel, M.W. (2009). Responding to public and private politics: corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157-1178.
Berrone, P. & Gomez-mejia, L.R. (2009). Environmental performance and executive compensation: an integrated agency-institutional perspective. *Academy of Management Journal*, 52(1), 103-126.
Barnea, A. & Rubin, A. (2010). Corporate social responsibility as a conflict between shareholders. *Journal of Business Ethics*, 97(1), 71-86.
Miller, T. & Triana, M.D. (2009). Demographic diversity in the boardroom: mediators of the board diversity-firm performance relationship. *Journal of Management Studies*, 46(5), 755-786.
Jackson, G. & Apostolakou, A. (2010). Corporate social responsibility in Western Europe: an institutional mirror or substitute?. *Journal of Business Ethics*, 94(3), 371-394.

- CERTIFICATION

Mcwilliams, A. & Siegel, D.S. (2011). Creating and capturing value: strategic corporate social responsibility, resource-based theory, and sustainable competitive advantage. *Journal of Management*, 37(5), 1480-1495.
Castaldo, S., Perrini, F., Misani, N. & Tencati, A. (2009). The missing link between corporate social responsibility and consumer trust: the case of fair trade products. *Journal of Business Ethics*, 84(1), 1-15.
Molina-Azorin, J.F., Claver-cortes, E., Lopez-Gamero, M.D. & Tari, J.J. (2009). Green management and financial performance: a literature review. *Management Decision*, 47(7), 1080-1100.

Siegel, D.S. (2009). Green management matters only if it yields more green: an economic/strategic perspective. *Academy of Management Perspectives*, 23(3), 5-16.
Doran, C.J. (2009). The role of personal values in fair trade consumption. *Journal of Business Ethics*, 84(4), 549-563.
Delmas, M. & Blass, V.D. (2010). Measuring corporate environmental performance: the trade-offs of sustainability ratings. *Business Strategy and the Environment*, 19(4), 245-260.
Dobers, P. & Halme, M. (2009). Corporate social responsibility and developing countries. *Corporate Social Responsibility and Environmental Management*, 16(5), 237-249.
Gilbert, Du., Rasche, A. & Waddock, S. (2011). Accountability in a global economy: the emergence of international accountability standards. *Business Ethics Quarterly*, 21(1), 23-44.
Arimura, T.H., Darnall, N. & Katayama, H. (2011). Is iso 14001 a gateway to more advanced voluntary action? the case of green supply chain management. *Journal of Environmental Economics and Management*, 61(2), 170-182.
Mueller, M., Dos Santos, V.G. & Seuring, S. (2009). The contribution of environmental and social standards towards ensuring legitimacy in supply chain governance. *Journal of Business Ethics*, 89(4), 509-523.

- GREEN

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.
Surroca, J., Tribo, J.A. & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal*, 31(5), 463-490.
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., Cruz, C. & Gomez-Mejia, L.R. (2012). Socioemotional wealth in family firms: theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279.
Wood, D.J. (2010). Measuring corporate social performance: a review. *International Journal of Management Reviews*, 12(1), 50-84.
Reid, E.M. & Toffel, M.W. (2009). Responding to public and private politics: corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157-1178.
Berrone, P. & Gomez-Mejia, L.R. (2009). Environmental performance and executive compensation: an integrated agency-institutional perspective. *Academy of Management Journal*, 52(1), 103-126.
Dangelico, R. & Pujari, D. (2010). Mainstreaming green product innovation: why and how companies integrate environmental sustainability. *Journal of Business Ethics*, 95(3), 471-486.
Andersen, M. & Skjoett-Larsen, T. (2009). Corporate social responsibility in global supply chains. *Supply Chain Management-an International Journal*, 14(2), 75-86.
Sheth, J.N., Sethia, N.K. & Srinivas, S. (2011). Mindful consumption: a customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39(1), 21-39.

- EMPLOYEE-COMMITMENT

Bhattacharya, Cb., Korschun, D. & Sen, S. (2009). Strengthening stakeholder-company relationships through mutually beneficial corporate social responsibility initiatives. *Journal of Business Ethics*, 85, 257-272.
Peloza, J. & Shang, Jz. (2011). How can corporate social responsibility activities create value for stakeholders? a systematic review. *Journal of the Academy of Marketing Science*, 39(1), 117-135.
Vlachos, Pa., Tsamakos, A., Vrechopoulos, Ap. & Avramidis, Pk. (2009). Corporate social responsibility: attributions, loyalty, and the mediating role of trust. *Journal of the Academy of Marketing Science*, 37(2), 170-180.
Prothero, A., Dobscha, S., Freund, J., Kilbourne, We., Luchs, Mg., Ozanne, Lk. & Thogersen, J. (2011). Sustainable consumption: opportunities for consumer research and public policy. *Journal of Public Policy & Marketing*, 30(1), 31-38.
Marin, L., Ruiz, S. & Rubio, A. (2009). The role of identity salience in the effects of corporate social responsibility on consumer behavior. *Journal of Business Ethics*, 84(1), 65-78.
Castaldo, S., Perrini, F., Misani, N. & Tencati, A. (2009). The missing link between corporate social responsibility and consumer trust: the case of fair trade products. *Journal of Business Ethics*, 84(1), 1-15.

Kim, Hr., Lee, M., Lee, Ht. & Kim, Nm. (2010). Corporate social responsibility and employee-company identification. *Journal of Business Ethics*, 95(4), 557-569.
Linnenluecke, Mk. & Griffiths, A. (2010). Corporate sustainability and organizational culture. *Journal of World Business*, 45(4), 357-366.
Fassin, Y. (2009). The stakeholder model refined. *Journal of Business Ethics*, 84(1), 113-135.
Ozaki, R. (2011). Adopting sustainable innovation: what makes consumers sign up to green electricity?. *Business Strategy and the Environment*, 20(1), 1-17.

- MULTINATIONAL-CORPORATIONS

Scherer, A.G. & Palazzo, G. (2011). The new political role of business in a globalized world: a review of a new perspective on CSR and its implications for the firm, governance, and democracy. *Journal of Management Studies*, 48(4), 899-931.
Turker, D. (2009). Measuring corporate social responsibility: a scale development study. *Journal of Business Ethics*, 85(4), 411-427.
Wagner, T., Lutz, R.J. & Weitz, B.A. (2009). Corporate hypocrisy: overcoming the threat of inconsistent corporate social responsibility perceptions. *Journal of Marketing*, 73(6), 77-91.
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.
Reid, E.M. & Toffel, M.W. (2009). Responding to public and private politics: corporate disclosure of climate change strategies. *Strategic Management Journal*, 30(11), 1157-1178.
Vlachos, P.A., Tsamakos, A., Vrechopoulos, A.P. & Avramidis, P.K. (2009). Corporate social responsibility: attributions, loyalty, and the mediating role of trust. *Journal of the Academy of Marketing Science*, 37(2), 170-180.
Holburn, G.L.F.. & Zelner, B.A. (2010). Political capabilities, policy risk, and international investment strategy: evidence from the global electric power generation industry. *Strategic Management Journal*, 31(12), 1290-1315.
Turker, D. (2009). How corporate social responsibility influences organizational commitment. *Journal of Business Ethics*, 89(2), 189-204.
Castaldo, S., Perrini, F., Misani, N. & Tencati, A. (2009). The missing link between corporate social responsibility and consumer trust: the case of fair trade products. *Journal of Business Ethics*, 84(1), 1-15.
Kolk, A. & Van Tulder, R. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*, 19(2), 119-125.

Period 2014-2017

- CORPORATE-SOCIAL-RESPONSIBILITY

Cheng, B.T., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1-23.
Crane, A., Palazzo, G., Spence, L.J. & Matten, D. (2014). Contesting the value of "creating shared value". *California Management Review*, 56(2), 130-149.
Saeidi, S.P., Sofian, S., Saeidi, P., Saeidi, S.P. & Saaeidi, S.A. (2015). How does corporate social responsibility contribute to firm financial performance? the mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
Jones, D.A., Willness, C.R. & Madey, S. (2014). Why are job seekers attracted by corporate social performance? experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383-404.
Hahn, T., Pinkse, J., Preuss, L. & Figge, F. (2015). Tensions in corporate sustainability: towards an integrative framework. *Journal of Business Ethics*, 127(2), 297-316.
Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1), 32-44.
Lee, J.H., Hancock, Mg. & Hu, Mc. (2014). Towards an effective framework for building smart cities: lessons from Seoul and San Francisco. *Technological Forecasting and Social Change*, 89, 80-99.

Kolk, A., Rivera-santos, M. & Rufin, C. (2014). Reviewing a decade of research on the "base/bottom of the pyramid" (bop) concept. *Business & Society*, 53(3), 338-377.
Varsei, M., Soosay, C., Fahimnia, B. & Sarkis, J. (2014). Framing sustainability performance of supply chains with multidimensional indicators. *Supply Chain Management-an International Journal*, 19(3), 242-257.
Korschun, D., Bhattacharya, C.B. & Swain, S.D. (2014). Corporate social responsibility, customer orientation, and the job performance of frontline employees. *Journal of Marketing*, 78(3), 20-37.

- CORPORATE-GOVERNANCE

Jizi, M.I., Salama, A., Dixon, R. & Stratling, R. (2014). Corporate governance and corporate social responsibility disclosure: evidence from the us banking sector. *Journal of Business Ethics*, 125(4), 601-615.
Cruz, C., Larraza-kintana, M., Garces-galdeano, L. & Berrone, P. (2014). Are family firms really more socially responsible?. *Entrepreneurship theory and practice*, 38(6), 1295-1316.
Goranova, M. & Ryan, L.V. (2014). Shareholder activism: a multidisciplinary review. *Journal of Management*, 40(5), 1230-1268.
Terjesen, S., Aguilera, R.V. & Lorenz, R. (2015). Legislating a woman's seat on the board: institutional factors driving gender quotas for boards of directors. *Journal of Business Ethics*, 128(2), 233-251.
Amran, A., Lee, S.P. & Devi, S.S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217-235.
Mason, C. & Simmons, J. (2014). Embedding corporate social responsibility in corporate governance: a stakeholder systems approach. *Journal of Business Ethics*, 119(1), 77-86.
Filatotchev, I. & Nakajima, C. (2014). Corporate governance, responsible managerial behavior, and corporate social responsibility: organizational efficiency versus organizational legitimacy?. *Academy of Management Perspectives*, 28(3), 289-306.
Chan, M.C., Watson, J. & Woodliff, D. (2014). Corporate governance quality and CSR disclosures. *Journal of Business Ethics*, 125(1), 59-73.
Klettner, A., Clarke, T. & Boersma, M. (2014). The governance of corporate sustainability: empirical insights into the development, leadership and implementation of responsible business strategy. *Journal of Business Ethics*, 122(1), 145-165.
Marques, P., Presas, P. & Simon, A. (2014). The heterogeneity of family firms in CSR engagement: the role of values. Family Business Review, 27(3), 206-227.

- RESEARCH-AND-DEVELOPMENT

Cheng, B.T., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1-23.
Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D. & Overy, P. (2016). Sustainability-oriented innovation: a systematic review. *International Journal of Management Reviews*, 18(2), 180-205.
Nesta, L., Vona, F. & Nicolli, F. (2014). Environmental policies, competition and innovation in renewable energy. *Journal of Environmental Economics and Management*, 67(3), 396-411.
Goranova, M. & Ryan, L.V. (2014). Shareholder activism: a multidisciplinary review. *Journal of Management*, 40(5), 1230-1268.
Dietrich, J.P., Schmitz, C., Lotze-campen, H., Popp, A. & Muller, C. (2014). Forecasting technological change in agriculture-an endogenous implementation in a global, and use model. *Technological Forecasting and Social Change*, 81), 236-249.
Beske-janssen, P., Johnson, M.P. & Schaltegger, S. (2015). 20 years of performance measurement in sustainable supply chain management - what has been achieved?. *Supply Chain Management-an International Journal*, 20(6), 664-680.
Kang, C., Germann, F. & Grewal, R. (2016). Washing away your sins? corporate social responsibility, corporate social irresponsibility, and firm performance. *Journal of Marketing*, 80(2), 59-79.
Bocken, Nmp., Farracho, M., Bosworth, R. & Kemp, R. (2014). The front-end of eco-innovation for eco-innovative small and medium sized companies. *Journal of engineering and technology management*, 31, 43-57.

Hitt, Ma., Li, D. & Xu, K. (2016). International strategy: from local to global and beyond. *Journal of world business*, 51(1), 58-73.
Huang, J.W. & Li, Y.H. (2017). Green innovation and performance: the view of organizational capability and social reciprocity. *Journal of Business Ethics*, 145(2), 309-324.

- RESOURCE-BASED-VIEW

Saeidi, S.P., Sofian, S., Saeidi, P., Saeidi, S.P. & Saaeidi, S.A. (2015). How does corporate social responsibility contribute to firm financial performance? the mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
Beske, P. & Seuring, S. (2014). Putting sustainability into supply chain management. *Supply Chain Management-an International Journal*, 19(3), 322-331.
Varsei, M., Soosay, C., Fahimnia, B. & Sarkis, J. (2014). Framing sustainability performance of supply chains with multidimensional indicators. *Supply Chain Management-an International Journal*, 19(3), 242-257.
Ioannou, I. & Serafeim, G. (2015). The impact of corporate social responsibility on investment recommendations: analysts' perceptions and shifting institutional logics. *Strategic Management Journal*, 36(7), 1053-1081.
Baumgartner, R.J. (2014). Managing corporate sustainability and csr: a conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility and Environmental Management*, 21(5), 258-271.
Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *Journal of Business Ethics*, 119(3), 317-328.
Schaltegger, S. & Burritt, R. (2014). Measuring and managing sustainability performance of supply chains review and sustainability supply chain management framework. *Supply Chain Management-an International Journal*, 19(3), 232-241.
Paille, P., Chen, Y., Boiral, O. & Jin, J.F. (2014). The impact of human resource management on environmental performance: an employee-level study. *Journal of Business Ethics*, 121(3), 451-466.
Endrikat, J., Guenther, E. & Hoppe, H. (2014). Making sense of conflicting empirical findings: a meta-analytic review of the relationship between corporate environmental and financial performance. *European management journal*, 32(5), 735-751.
Mellahi, K., Frynas, J.G., Sun, P. & Siegel, D. (2016). A review of the nonmarket strategy literature: toward a multi-theoretical integration. *Journal of Management*, 42(1), 143-173.

- FIRM-VALUE

Lourenco, I.C., Callen, J.L., Branco, Mc. & Curto, J.D. (2014). The value relevance of reputation for sustainability leadership. *Journal of Business Ethics*, 119(1), 17-28.
Malik, M. (2015). Value-enhancing capabilities of CSR: a brief review of contemporary literature. *Journal of Business Ethics*, 127(2), 419-438.
Martinez-Ferrero, J. & Frias-Aceituno, J.V. (2015). Relationship between sustainable development and financial performance: international empirical research. Business Strategy and the Environment, 24(1), 20-39.
Wang, Q., Dou, J.S. & Jia, S.H. (2016). A meta-analytic review of corporate social responsibility and corporate financial performance: the moderating effect of contextual factors. *Business & Society*, 55(8), 1083-1121.
Jo, H., Kim, H. & Park, K. (2015). Corporate environmental responsibility and firm performance in the financial services sector. *Journal of Business Ethics*, 131(2), 257-284.
Girerd-potin, I., Jimenez-Garces, S. & Louvet, P. (2014). Which dimensions of social responsibility concern financial investors?. *Journal of Business Ethics*, 121(4), 559-576.
Carnevale, C. & Mazzuca, M. (2014). Sustainability report and bank valuation: evidence from european stock markets. *Business Ethics-a European Review*, 23(1), 69-90.
Gregory, A., Tharyan, R. & Whittaker, J. (2014). Corporate social responsibility and firm value: disaggregating the effects on cash flow, risk and growth. *Journal of Business Ethics*, 124(4), 633-657.
Mishra, S. & Modi, S.B. (2016). Corporate social responsibility and shareholder wealth: the role of marketing capability. *Journal of Marketing*, 80(1), 26-46.

Ramanathan, R., Poomkaew, B. & Nath, P. (2014). The impact of organizational pressures on environmental performance of firms. *Business Ethics-a European Review*, 23(2), 169-182.

- SMES

Cheng, Bt., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1-23.

Wolf, J. (2014). The relationship between sustainable supply chain management, stakeholder pressure and corporate sustainability performance. *Journal of Business Ethics*, 119(3), 317-328.

Fernandez-feijoo, B., Romero, S. & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the gri framework. *Journal of Business Ethics*, 122(1), 53-63.

Adams, R., Jeanrenaud, S., Bessant, J., Denyer, D. & Overy, P. (2016). Sustainability-oriented innovation: a systematic review. *International Journal of Management Reviews*, 18(2), 180-205.

Scherer, Ag., Palazzo, G. & Matten, D. (2014). The business firm as a political actor: a new theory of the firm for a globalized world. *Business & Society*, 53(2), 143-156.

Kolk, A. (2016). The social responsibility of international business: from ethics and the environment to csr and sustainable development. *Journal of world business*, 51(1), 23-34.

Mellahi, K., Frynas, Jg., Sun, P. & Siegel, D. (2016). A review of the nonmarket strategy literature: toward a multi-theoretical integration. *Journal of Management*, 42(1), 143-173.

Lewis, Bw., Walls, Jl. & Dowell, Gws. (2014). Difference in degrees: ceo characteristics and firm environmental disclosure. *Strategic Management Journal*, 35(5), 712-722.

Frynas, Jg. & Yamahaki, C. (2016). Corporate social responsibility: review and roadmap of theoretical perspectives. *Business Ethics-a European Review*, 25(3), 258-285.

Hansen, Eg. & Schaltegger, S. (2016). The sustainability balanced scorecard: a systematic review of architectures. *Journal of Business Ethics*, 133(2), 193-221.

- ENVIRONMENTAL-DISCLOSURES

Riahi, K., Kriegler, E., Johnson, N., Bertram, C., Den Elzen, M., Eom, J., Schaeffer, M., Edmonds, J., Isaac, M., Krey, V., Longden, T., Luderer, G., Mejean, A., Mccollum, D.L., Mima, S., Turton, H., Van Vuuren, D.P., Wada, K., Bosetti, V., Capros, P., Criqui, P., Hamdi-cherif, M., Kainuma, M. & Edenhofer, O. (2015). Locked into copenhagen pledges - implications of short-term emission targets for the cost and feasibility of long-term climate goals. *Technological Forecasting and Social Change*, 90, 8-23.

Jizi, Mi., Salama, A., Dixon, R. & Stratling, R. (2014). Corporate governance and corporate social responsibility disclosure: evidence from the us banking sector. *Journal of Business Ethics*, 125(4), 601-615.

Fernandez-Feijoo, B., Romero, S. & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the gri framework. *Journal of Business Ethics*, 122(1), 53-63.

Sexton, Se. & Sexton, A.L. (2014). Conspicuous conservation: the prius halo and willingness to pay for environmental bona fides. *Journal of Environmental Economics and Management*, 67(3), 303-317.

Frias-aceituno, J.V., Rodriguez-Ariza, L. & Garcia-Sanchez, I.M. (2014). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23(1), 56-72.

Hahn, R. & Lulfs, R. (2014). Legitimizing negative aspects in gri-oriented sustainability reporting: a qualitative analysis of corporate disclosure strategies. *Journal of Business Ethics*, 123(3), 401-420.

Lewis, B.W., Walls, J.L. & Dowell, G.W.S. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. *Strategic Management Journal*, 35(5), 712-722.

Amran, A., Lee, S.P. & Devi, S.S. (2014). The influence of governance structure and strategic corporate social responsibility toward sustainability reporting quality. *Business Strategy and the Environment*, 23(4), 217-235.

Luo, X.M., Wang, H.L., Raithel, S. & Zheng, Qq. (2015). Corporate social performance, analyst stock recommendations, and firm future returns. *Strategic Management Journal*, 36(1), 123-136.

Alonso-Almeida, M.D., Llach, J. & Marimon, F. (2014). A closer look at the 'global reporting initiative' sustainability reporting as a tool to implement environmental and social policies: a worldwide sector analysis. *Corporate Social Responsibility and Environmental Management*, 21(6), 318-335.

- CORPORATE-SOCIAL-PERFORMANCE

Cheng, B.T., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1-23.
Crane, A., Palazzo, G., Spence, L.J. & Matten, D. (2014). Contesting the value of "creating shared value". *California Management Review*, 56(2), 130-149.
Saeidi, S.P., Sofian, S., Saeidi, P., Saeidi, S.P. & Saaeidi, S.A. (2015). How does corporate social responsibility contribute to firm financial performance? the mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of Business Research*, 68(2), 341-350.
Hahn, T., Preuss, L., Pinkse, J. & Figge, F. (2014). Cognitive frames in corporate sustainability: managerial sensemaking with paradoxical and business case frames. *Academy of Management Review*, 39(4), 463-487.
Beske, P. & Seuring, S. (2014). Putting sustainability into supply chain management. *Supply Chain Management-an International Journal*, 19(3), 322-331.
Henisz, Wj., Dorobantu, S. & Nartey, L.J. (2014). Spinning gold: the financial returns to stakeholder engagement. *Strategic Management Journal*, 35(12), 1727-1748.
Ioannou, I. & Serafeim, G. (2015). The impact of corporate social responsibility on investment recommendations: analysts' perceptions and shifting institutional logics. *Strategic Management Journal*, 36(7), 1053-1081.
Jizi, M.I., Salama, A., Dixon, R. & Stratling, R. (2014). Corporate governance and corporate social responsibility disclosure: evidence from the us banking sector. *Journal of Business Ethics*, 125(4), 601-615.
Park, J., Lee, H. & Kim, C. (2014). Corporate social responsibilities, consumer trust and corporate reputation: south korean consumers' perspectives. *Journal of Business Research*, 67(3), 295-302.
Hofmann, H., Busse, C., Bode, C. & Henke, M. (2014). Sustainability-related supply chain risks: conceptualization and management. *Business Strategy and the Environment*, 23(3), 160-172

Period 2018-2021

- CORPORATE-SOCIAL-RESPONSIBILITY

He, H. & Harris, L. (2020). The impact of covid-19 pandemic on corporate social responsibility and marketing philosophy. *Journal of Business Research*, 116), 176-182.
White, K., Habib, R. & Hardisty, D.J. (2019). How to shift consumer behaviors to be more sustainable: a literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.
Jamali, D. & Karam, C. (2018). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*, 20(1), 32-61.
Singh, S.K., del Giudice, M., Chierici, R. & Graziano, D. (2020). Green innovation and environmental performance: the role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150), 119762.
Hussain, N., Rigoni, U. & Orij, R.P. (2018). Corporate governance and sustainability performance: analysis of triple bottom line performance. *Journal of Business Ethics*, 149, 411-432.
El-kassar, A.N. & Singh, S.K. (2019). Green innovation and organizational performance: the influence of big data and the moderating role of management commitment and HT practices. *Technological Forecasting and Social Change*, 144), 483-498.
Xie, X., Huo, Ji. & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: a content analysis method. *Journal of Business Research*, 101, 697-706.
El Akremi, A., Gond, J.P., Swaen, V., de Roeck, K. & Igalens, J. (2018). How do employees perceive corporate responsibility? Development and validation of a multidimensional corporate stakeholder responsibility scale. *Journal of Management*, 44(2), 619–657.
Cui, J., Jo, H. & Na, H. (2018). Does corporate social responsibility affect information asymmetry?. *Journal of Business Ethics*, 148), 549-572.
Aguinis, H. & Glavas, A. (2019). On corporate social responsibility, sensemaking, and the search for meaningfulness through work. *Journal of Management*, 45(3), 1057-1086.

- CORPORATE-GOVERNANCE

Hussain, N., Rigoni, U. & Orij, R.P. (2018). Corporate governance and sustainability performance: analysis of triple bottom line performance. *Journal of Business Ethics*, 149, 411–432.
Cui, J., Jo, H. & Na, H. (2018). Does corporate social responsibility affect information asymmetry?. *Journal of Business Ethics*, 148), 549-572.
Cucari, N., de Falco, S.E. & Orlando, B. (2018). Diversity of board of directors and environmental social governance: evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250-266.
Liao, Lin., Lin, T (philip). & Zhang, Y. (2018). Corporate board and corporate social responsibility assurance: evidence from China. *Journal of Business Ethics*, 150, 211–225.
Elmagrhi, M.H., Ntim, Collins.G., Elamer, A.A. & Zhang, Q. (2019). A study of environmental policies and regulations, governance structures, and environmental performance: the role of female directors. *Business Strategy and the Environment*, 28(1), 206-220.
Hoobler, J.M., Masterson, C.R., Nkomo, S.M. & Michel, E.J. (2018). The business case for women leaders: meta-analysis, research critique, and path forward. *Journal of Management*, 44(6), 2473-2499.
Benlemlih, M. & Bitar, M. (2018). Corporate social responsibility and investment efficiency. *Journal of Business Ethics*, 148), 647-671.
Jung, J., Herbohn, K. & Clarkson, P. (2018). Carbon risk, carbon risk awareness and the cost of debt financing. *Journal of Business Ethics*, 150), 1151–1171.
Li, Z., Liao, G. & Albitar, K. (2020). Does corporate environmental responsibility engagement affect firm value? the mediating role of corporate innovation. *Business Strategy and the Environment*, 29(3), 1045-1055.
Haque, F. & Ntim, C.0G.. (2018). Environmental policy, sustainable development, governance mechanisms and environmental performance. *Business Strategy and the Environment*, 27(3), 415-435.

- ECO-INNOVATION

Li, L. (2018). China's manufacturing locus in 2025: with a comparison of "Made-in-China 2025" and "Industry 4.0". *Technological Forecasting and Social Change*, 135, 66-74.
Singh, S.K., del Giudice, M., Chierici, R. & Graziano, D. (2020). Green innovation and environmental performance: the role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150), 119762.
El-kassar, A.N. & Singh, S.K. (2019). Green innovation and organizational performance: the influence of big data and the moderating role of management commitment and HR practices. *Technological Forecasting and Social Change*, 144), 483-498.
Xie, X., H, Jiage. & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: a content analysis method. *Journal of Business Research*, 101, 697-706.
Mazzucato, M. & Semieniuk, G. (2018). Financing renewable energy: who is financing what and why it matters. *Technological Forecasting and Social Change*, 127), 8-22.
Tang, M., Walsh, G., Lerner, D., Fitza, M.A. & Li, Q. (2018). Green innovation, managerial concern and firm performance: an empirical study. *Business Strategy and the Environment*, 27(1), 39-51.
Song, W. & Yu, H. (2018). Green innovation strategy and green innovation: the roles of green creativity and green organizational identity. *Corporate Social Responsibility and Environmental Management*, 25(2), 135-150.
Li, D., Huang, M., Ren, S., Chen, Xi. & Ning, L. (2018). Environmental legitimacy, green innovation, and corporate carbon disclosure: evidence from CDP China 100. *Journal of Business Ethics*, 150, 1089–1104.
Testa, F., Boiral, O. & Iraldo, F. (2018). Internalization of environmental practices and institutional complexity: can stakeholders pressures encourage greenwashing?. *Journal of Business Ethics*, 147, 287–307.
Ben Arfi, W., Hikkerova, L. & Sahut, J.M. (2018). External knowledge sources, green innovation and performance. *Technological Forecasting and Social Change*, 129), 210-220.

- ECONOMIC-GROWTH

Shi, Xi. & Xu, Z. (2018). Environmental regulation and firm exports: evidence from the eleventh five-year plan in China. *Journal of Environmental Economics and Management*, 89, 187-20.
Cucari, N., de Falco, S.E. & Orlando, B. (2018). Diversity of board of directors and environmental social governance: evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250-266.
Baloch, M.A., Ozturk, I., Bekun, F.V. & Khan, D. (2021). Modeling the dynamic linkage between financial development, energy innovation, and environmental quality: does globalization matter?. *Business Strategy and the Environment*, 30(1), 176-184.
Du, K., Li, P. & Yan, Z. (2019). Do green technology innovations contribute to carbon dioxide emission reduction? empirical evidence from patent data. *Technological Forecasting and Social Change*, 146, 297-303.
Ben Arfi, W., Hikkerova, L. & Sahut, J.M. (2018). External knowledge sources, green innovation and performance. *Technological Forecasting and Social Change*, 129, 210-220.
Asongu, S.A., Le Roux, S. & Biekpe, Ni. (2018). Enhancing ICT for environmental sustainability in sub-Saharan Africa. *Technological Forecasting and Social Change*, 127, 209-216.
El G, Sadok., G, Omrane., Kim, H. & Park, K. (2018). Corporate environmental responsibility and the cost of capital: international evidence. *Journal of Business Ethics*, 149, 335-361.
Jung, J., Herbohn, K. & Clarkson, P. (2018). Carbon risk, carbon risk awareness and the cost of debt financing. *Journal of Business Ethics*, 150), 1151-1171.
Pan, X., Ai, B., Li, C., Pan, X. & Yan, Y. (2019). Dynamic relationship among environmental regulation, technological innovation and energy efficiency based on large scale provincial panel data in China. *Technological Forecasting and Social Change*, 144, 428-435.
Wang, R., Wijen, F. & Heugens, P.P.M.A.R. (2018). Government's green grip: multifaceted state influence on corporate environmental actions in China. *Strategic Management Journal*, 39(2), 403-428.

- RESOURCE-BASED-VIEW

Singh, S.K., del Giudice, M, Chierici, R. & Graziano, D. (2020). Green innovation and environmental performance: the role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, 150, 119762.
El-kassar, A.N. & Singh, S.K. (2019). Green innovation and organizational performance: the influence of big data and the moderating role of management commitment and HR practices. *Technological Forecasting and Social Change*, 144, 483-498.
Dubey, R., Gunasekaran, A., Childe, S.J., Papadopoulos, T., Luo, Z., Wamba, S.F. & Roubaud, D. (2019). Can big data and predictive analytics improve social and environmental sustainability?. *Technological Forecasting and Social Change*, 144, 534-545.
Tang, M., Walsh, G., Lerner, D., Fitza, M.A. & Li, Qi. (2018). Green innovation, managerial concern and firm performance: an empirical study. *Business Strategy and the Environment*, 27(1), 39-51.
Song, W. & Yu, H. (2018). Green innovation strategy and green innovation: the roles of green creativity and green organizational identity. *Corporate Social Responsibility and Environmental Management*, 25(5), 135-150.
Li, D., Huang, M., Ren, S., Chen, X. & Ning, L. (2018). Environmental legitimacy, green innovation, and corporate carbon disclosure: evidence from CDP China 100. *Journal of Business Ethics*, 150, 1089-1104.
Testa, F., Boiral, O. & Iraldo, F. (2018). Internalization of environmental practices and institutional complexity: can stakeholders pressures encourage greenwashing?. *Journal of Business Ethics*, 147, 287-307.
Ben A, Wissal., Hikkerova, L. & Sahut, J.M. (2018). External knowledge sources, green innovation and performance. *Technological Forecasting and Social Change*, 129, 210-220.
Hoobler, J.M., Masterson, C.R.., Nkomo, S.M. & Michel, E.J. (2018). The business case for women leaders: meta-analysis, research critique, and path forward. *Journal of Management*, 44(6), 2473-2499.
Kraus, S., Rehman, S.U. & Sendra Garcia, F.J. (2020). Corporate social responsibility and environmental performance: the mediating role of environmental strategy and green innovation. *Technological Forecasting and Social Change*, 160, 120262.

- CLIMATE-CHANGE

White, K., Habib, R. & Hardisty, D.J. (2019). How to shift consumer behaviors to be more sustainable: a literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.

Mazzucato, M. & Semieniuk, G. (2018). Financing renewable energy: who is financing what and why it matters. *Technological Forecasting and Social Change*, 127, 8-22.

Shi, X. & Xu, Z. (2018). Environmental regulation and firm exports: evidence from the eleventh five-year plan in China. *Journal of Environmental Economics and Management*, 89, 187-200.

Hahn, T., Figge, F., Pinkse, J. & Preuss, L. (2018). A paradox perspective on corporate sustainability: descriptive, instrumental, and normative aspects. Journal of Business Ethics, 148, 235-248.

Li, D., Huang, M., Ren, S., Chen, X. & Ning, L. (2018). Environmental legitimacy, green innovation, and corporate carbon disclosure: evidence from CDP China 100. *Journal of Business Ethics*, 150, 1089-1104.

Bin Saeed, B., Afsar, B., Hafeez, S., Khan, I., Tahir, M. & Afridi, M.A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management*, 26(2), 424-438.

Kim, K.H., Kim, M. & Qian, C. (2018). Effects of corporate social responsibility on corporate financial performance: a competitive-action perspective. *Journal of Management*, 44(3), 1097-1118.

Huang, Z., Liao, G. & Li, Z. (2019). Loaning scale and government subsidy for promoting green innovation. *Technological Forecasting and Social Change*, 144, 148-156.

Doern, R., Williams, N. & Vorley, T. (2019). Special issue on entrepreneurship and crises: business as usual? an introduction and review of the literature. *Entrepreneurship and regional development*, 31(5-6), 400-412.

Zhang, J. & Mu, Q. (2018). Air pollution and defensive expenditures: evidence from particulate-filtering facemasks. *Journal of Environmental Economics and Management*, 92, 517-536.

- ENVIRONMENTAL-DISCLOSURES

Hussain, N., Rigoni, U. & Orij, R.P (2018). Corporate governance and sustainability performance: analysis of triple bottom line performance. *Journal of Business Ethics*, 149, 411-432.

Cui, J., Jo, H. & Na, H. (2018). Does corporate social responsibility affect information asymmetry?. *Journal of Business Ethics*, 148, 549-572.

Shi, X. & Xu, Z. (2018). Environmental regulation and firm exports: evidence from the eleventh five-year plan in China. *Journal of Environmental Economics and Management*, 89, 187-200.

Cucari, N., de Falco, S.E. & Orlando, B. (2018). Diversity of board of directors and environmental social governance: evidence from Italian listed companies. *Corporate Social Responsibility and Environmental Management*, 25(3), 250-266.

Platonova, E., Asutay, M., Dixon, R. & Mohammad, S. (2018). The impact of corporate social responsibility disclosure on financial performance: evidence from the GCC Islamic banking sector. *Journal of Business Ethics*, 151, 451-471.

Xie, J., Nozawa, W., Yagi, M., Fujii, Hi. & Managi, S. (2019). Do environmental, social, and governance activities improve corporate financial performance?. *Business Strategy and the Environment*, 28(2), 286-300.

Benlemlih, M. & Bitar, M. (2018). Corporate social responsibility and investment efficiency. *Journal of Business Ethics*, 148, 647-671.

Schaltegger, S. & Burritt, R. (2018). Business cases and corporate engagement with sustainability: differentiating ethical motivations. *Journal of Business Ethics*, 147) 241-259.

Aouadi, A. & Marsat, S. (2018). Do ESG controversies matter for firm value? evidence from international data. *Journal of Business Ethics*, 151, 1027-1047.

Li, Z., Liao, G. & A, K. (2020). Does corporate environmental responsibility engagement affect firm value? the mediating role of corporate innovation. *Business Strategy and the Environment*, 29(3), 1045-1055.

- CONSUMERS

White, K., Habib, R. & Hardisty, D.J. (2019). How to shift consumer behaviors to be more sustainable: a literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.

Baloch, M.A., Ozturk, I., Bekun, F.V. & Khan, D. (2021). Modeling the dynamic linkage between financial development, energy innovation, and environmental quality: does globalization matter?. *Business Strategy and the Environment*, 30(1), 176-184.
Pedersen, E.R.G., Gwozdz, W. & Hvass, K.K. (2018). Exploring the relationship between business model innovation, corporate sustainability, and organisational values within the fashion industry. *Journal of Business Ethics*, 149, 267-284.
Park, H.J. & Lin, L.M. (2020). Exploring attitude-behavior gap in sustainable consumption: comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623-628.
Wang, R., Wijen, F. & Heugens, P.P.M.A.R. (2018). Government's green grip: multifaceted state influence on corporate environmental actions in China. *Strategic Management Journal*, 39(2), 403-428.
Rana, J. & Paul, J. (2020). Health motive and the purchase of organic food: a meta-analytic review. International journal of consumer studies, 44(2), 162-171.
Flammer, C. (2018). Competing for government procurement contracts: the role of corporate social responsibility. *Strategic Management Journal*, 39(5), 1299-1324.
Stone, J. & Rahimifard, S. (2018). Resilience in agri-food supply chains: a critical analysis of the literature and synthesis of a novel framework. *Supply Chain Management-an International Journal*, 23(3), 207-238.
Verma, V.K., Chandra, B. & Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, 96, 206-216.
Iglesias, O., Markovic, S., Bagherzadeh, M. & Singh, J.J. (2020). Co-creation: a key link between corporate social responsibility, customer trust, and customer loyalty. *Journal of Business Ethics*, 163, 151-166.