

# **PHD**

The role of institutional pressures in shaping corporate social performance: understanding the decision to join and performance in the United Nations Global Compact

De Paula Cidade Miranda, Gabriela

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# The role of institutional pressures in shaping corporate social performance: understanding the decision to join and performance in the United Nations Global Compact

Gabriela de Paula Cidade Miranda

A thesis submitted for the degree of Doctor of Philosophy
University of Bath
School of Management
December 2014

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## **Abstract**

Interest and engagement on voluntary CSR initiatives has grown substantially over the last decades. Such initiatives may offer an alternative to traditional command-and-control regulation, particularly relevant in the context of a globalised economy where regulating the behaviour of corporations in regards to corporate social performance (CSP) poses major challenges (Hess, 2008). These have thus been of increasing interest to firms, governments, civil society and other stakeholders, configuring what Waddock (2008) has termed an emerging institutional infrastructure for corporate responsibility. The United Nations Global Compact (UNGC) is the largest CSR initiative in the world. With over 8,000 participating firms from more than 140 countries and varied sizes and industries, the UNGC has a truly global and diverse coverage if compared to similar initiatives. Adding to its uniqueness, the UNGC is backed by the United Nations. However, despite the UNGC's success in attracting participants, market willingness to reward responsible behaviour (Hull and Rothenberg, 2008), and mounting stakeholder pressure, a great level of variation can still be observed on firms' engagement with the UNGC.

Equally, despite increasing interest, a number of gaps remain in the literature in the understanding of drivers for joining and for performance in the initiative. For one thing, only one study focused on speed of adoption in the UNGC; it was, however, restricted to the Spanish context. In the sphere of performance, studies have often used limited samples or measures of performance that do not encompass all the UNGC issues; in addition, results remain mixed generating an inconclusive body of knowledge. Applying institutional theory, this thesis evaluates the extent to which institutional pressures at firm, industry and national levels may influence firms' decision to join the UNGC, their speed of adoption, and their performance in the issues advanced by the initiative. Using a dataset covering environment, social and governance data on over 4,000 global listed companies since 2002 in combination with relevant institutional data, this thesis addresses the gaps above.

Results suggest strong evidence that institutional forces at all levels are at play, influencing firms' decision to join and performance in the UNGC principles. For one thing, mimetic forces were very important in driving both firms' decision to join the UNGC and their performance. Being under greater stakeholder scrutiny due to large size or belonging to an extractive industry was also an important driver for joining the UNGC, arguably in views of protecting legitimacy seen to

be at threat. Finally, looking into the UNGC as a source of institutional pressure as well, despite criticisms in regards to the UNGC's "lack of teeth", there is strong evidence to suggest that participants are improving performance more than non-participants in the UNGC principles. Even though more attention needs to be dedicated to the delivery of outcomes, there is strong evidence that the UNGC is making important strides in its aim of promoting a more sustainable and inclusive global economy.

This thesis makes important contributions to the academic literature by, among other things, using a measure of performance that encompasses all UNGC principles and builds on sound theoretical base, longitudinally covering all UNGC principles in the aspects of policies, processes of implementation and whenever feasible outcomes. It also contributes to a better understanding of speed of adoption across participants in different countries and of role of CSP and mimetic pressures in firms' decision to join the UNGC. For practitioners, it provides valuable information for those trying to increase sign up or improve participants' performance in voluntary CSR initiatives in general and in the UNGC in particular. Empirical evidence on drivers for joining and performing may help these professionals choose the more appropriate strategies to make these initiatives successful in achieving a more responsible corporate world.

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# **List of Acronyms**

ASSET4 – Dataset on ESG data provided by ThompsonReuters

CME – Coordinated market economy

COP - Communication on progress

CSP - Corporate social performance

CSR – Corporate social responsibility

EITI - Extractive Industry Initiative

EMAS – EU Eco-Management and Audit Scheme

EMS - Environmental Management Systems

ESG - Environmental, social and governance

GRI - Global Reporting Initiative

LME - Liberal market economy

MNC - Multinational Corporation

MNE - Multinational enterprise

NGO – Non-governmental organisation

NYSE - New York Stock Exchange

OECD – Organisation for Economic Co-operation and Development

PRME – Principles for Responsible Management Education

ROTA – Return on total assets

SA8000 – Social Accountability 8000

UK - United Kingdom

UN - United Nations

UNCTAD - United Nations Conference on Trade and Development

UNCTC – United Nations Centre on Transnational Corporations

UNGC - United Nations Global Compact

US - United States of America

VoC - Varieties of capitalism

WGI - Worldwide Governance Indicators

# **Glossary**

COP – Communication on progress – The COP is a requirement by the UNGC to participating firms for an annual communication on the progress made in the implementation of the initiative's principles.

EITI – Extractive Industry Initiative – EITI is a global standard that strives to promote accountability and transparency in the management of natural resources.

EMAS – EU Eco-Management and Audit Scheme – Management tool to help firms evaluate, report and improve their environmental performance.

GRI – Global Reporting Initiative – GRI is an international organisation that provides widely used standards on the reporting and disclosure of sustainability issues.

ISO41001 – ISO14001 is a certifiable standard that defines the criteria for an environmental management system.

KLD – A rating service that ranks firms in the areas of community relations, employee relations, environmental performance, product characteristics, women and minorities relations, involvement in "sin" or controversial industries, investments in firms with poor CSP and areas where human rights controversies exist.

PRME – Principles for Responsible Management Education – Initiative that aims at inspiring and championing responsible business education, research and thought leadership in the world.

SA8000 – Social Accountability 8000 – It is a voluntary auditable social certification standard for working conditions.

UNCTAD – United Nations Conference on Trade and Development – This is a United Nations' body that deals with development issues, notably international trade.

UNCTC – United Nations Centre on Transnational Corporations – United Nations' body created in 1974 and abolished in 1993, which aimed at supporting UN's efforts to establish rules for transnational corporations' conduct in the global economy.

UNGC – United Nations Global Compact – United Nations' initiative aimed at engaging businesses in incorporating ten principles in the areas of human rights, labour, environment and anti-corruption into business practices.

WGI – Worldwide Governance Indicators – Country level governance indicators provided by the World Bank.

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# 1 Introduction

What do a major Indian multinational oil corporation, an American media SME, a Ugandan mobile telecommunications company and a small Russian law firm have in common? They are all current active participants in the United Nations Global Compact (UNGC). The UNGC and other voluntary Corporate Social Responsibility (CSR) initiatives aim to influence firm behaviour in Corporate Social Performance (CSP) (Perkins and Neumayer, 2010) and to hold firms accountable for their actions by creating transparency (Rasche, 2009b). Interest in, and use of, a diverse range of such initiatives has grown over time, especially in a context of a globalised economy where regulating the behaviour of corporations in regards to CSP poses major challenges (Hess, 2008). Arguably, initiatives such as the UNGC offer an alternative to traditional command-andcontrol regulation (Hess, 2008), and have thus been of considerable interest to governments, firms, civil society and other stakeholders over the last decades, configuring what Waddock (2008) has termed an emerging institutional infrastructure for corporate responsibility. The UNGC is considered to be the largest CSR initiative in the world. With over 12,000 participants worldwide, including over 8,000 firms, the UNGC currently has participants from over 140 countries and local supporting networks in over 100 countries, a truly global and wide coverage if compared to similar initiatives.

Despite the UNGC's (and other voluntary CSR initiatives') success, market willingness to reward responsible behaviour (Hull and Rothenberg, 2008), and mounting stakeholder pressure, a great level of variation can still be observed in corporate social performance across firms, and more specifically on their involvement with voluntary CSR initiatives and the UNGC. While sign up to the UNGC has grown substantially from the first 42 pioneer firms that joined when the initiative was launched in 2000 to over 8,000 firms today, this represents only a small fraction of large firms globally many firms remain unaware of the initiative and the issues it promotes.

In addition, the variety of behaviour does not only relate to the decision to join the UNGC. Even amongst those firms that decide to join, great variation in CSP behaviour still occurs, with some firms being considered "champions" of the initiative, with case studies portrayed in publications, while others are expelled for failing the basic requirement to communicate on progress in implementing the UNGC principles. As of 2 November 2013 4,199 firms had been expelled

from the UNGC for failure to communicate on progress. Given that in the same period the UNGC had 7,868 corporate participants, this is a significant number representing over 50% of the accumulated number of participants, and suggests that participants vary significantly in their performance and level of commitment to UNGC goals.

# 1.1 A research agenda

This thesis aims at increasing our understanding of the underlying processes by which variation across firms in the decision to join the UNGC and the subsequent variety in the levels of commitment to improved social performance arise. Specifically, it aims to evaluate the extent to which institutional pressures at multiple levels may influence firms' decision to join the UNGC, their speed of adoption, and their performance in the principles advanced by the initiative. While valuable knowledge has been shared in the literature, several questions remain open. Two main issues require additional investigation: drivers for joining and drivers for performance. A number of studies have identified and explored drivers for firms' joining the UNGC but these have tended to neglect the role of firms' previous CSP and of mimetic pressures, especially at industry level, in the decision to join the UNGC. In regards to speed of adoption, little has been covered in the field of voluntary CSR initiatives - except perhaps for the ISO14001 certification standard. Notably, studies on the diffusion and speed of adoption of the UNGC are extremely scarce (Arevalo et al., 2013). To the author's best knowledge, only one study on the UNGC has looked into speed of adoption (Arevalo et al., 2013) and that study was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption. Questions remain regarding the influences on firms' decisions to join the UNGC and in relation to the processes by which sign up diffuses across companies at a global level, crossing different institutional contexts.

Beyond the decision to join the UNGC, significant work remains to be done in relation to more fully illuminating the role played by UNGC membership in shaping firms' performance on social and environmental issues. Despite great interest on firm performance after joining voluntary CSR initiatives and on institutional influences on other aspects of CSP (Campbell, 2007, Matten and Moon, 2008, Jeurissen, 2004, Gjolberg, 2009), the literature on institutional influences on firm performance on voluntary CSR initiatives remains at an early stage of development (Knudsen, 2011). In addition, while the UNGC's ability, or otherwise, to influence CSP has been focus of major debates and criticism, only

a small number of studies have tackled this question empirically, and often with a limited sample or a measure of performance that did not encompass the full spectrum of UNGC issues. Results found were mixed, placing the UNGC's impact anywhere in a spectrum from having some impact on firm behaviour, to being weak at best in influencing corporate action (Hamann et al., 2009, Baumann and Scherer, 2010, Chen and Bouvain, 2009, Runhaar and Lafferty, 2009).

# 1.2 A contribution to scholars and to practitioners

Better understanding of these issues would make an important contribution both academically and to practitioners. The UNGC is the most prominent voluntary CSR initiative in the world and the one backed by the UN. As a result, it is watched closely by supporters and critics of this model of decentralised institutions through voluntary CSR initiatives. Arguably, its success or failure may have an impact on this model as a whole. Therefore, knowledge on aspects that make the initiative more or less effective in attracting firms and getting them to abide to the commitments made is very valuable for both academics and practitioners.

This thesis makes a number of relevant contributions. Overall it sheds light on firm behaviour in an important area of corporate social performance – engagement in voluntary CSR initiatives. This study shows strong evidence that this type of club-like behaviour has an important role to play in firms' CSP. Given the increasing interest and levels of sign up to voluntary CSR initiatives globally this makes an important contribution to the literature on CSP in general.

More specifically, it looks into the case of the UNGC and contributes to a better understanding of two fundamental aspects of voluntary CSR initiatives: firms' decision to join (part one – breadth of participation) and firms' performance in the commitments they sign up to (part two – depth of participation). In regards to the decision to join the UNGC, this thesis makes a relevant contribution by providing empirical evidence of the key role that mimetic pressures play in driving sign up. In other words, firms are more likely to sign up if peers within the same country or the same industry also do. These findings contribute to the literature on the UNGC in particular, as this effect has been largely unexplored in this literature.

Additionally, this is relevant information for practitioners. It suggests that strategies such as establishing partnerships with industry organisations or supporting local networks may be valuable tools in increasing sign up. These

may offer valuable outlets for the UNGC to display its participant's base and ultimately communicate its legitimacy amongst firms.

This first part, that explores the decision to join, also makes a relevant contribution to institutional theory by testing, discussing and questioning the two-stages model proposed by Tolbert and Zucker (1983) and also by institutional theory more generally. Results suggest that differently than proposed by theory, early joiners are more susceptible to mimetic pressures than late joiners. This suggests that legitimacy is an important motivation already in the early days of adoption of the UNGC. In addition, attention to the economic benefits of participation – arguably a more efficiency related motivation – was only relevant for late joiners. Overall this suggests that the model proposed by institutional theory does not hold for the UNGC.

Similar theoretical contribution is made on the second part of empirical studies, which explores firms' performance in the commitments made to the UNGC. Once again, the two-stages model is tested and does not hold for the UNGC, as early joiners are not found to be more likely to improve performance than late joiners.

The main contribution the second part makes, however, is empirical. This thesis offers a very broad and encompassing measure of performance of the UNGC, covering all ten principles firms commit to upon sign up. To this authors' best knowledge this is the first study on the UNGC with a measure of performance that encompasses these multiple dimensions of CSP. This offers the opportunity for a more granular understanding of performance in the initiative.

This second part also makes a relevant contribution to practitioners. For one thing, results suggesting that participants are more likely than non-participants to display improvements in the development of policies and the setting up of management structures to deliver on them supports the importance of the UNGC in helping establish higher CSP. The fact however that similar evidence in regards to the deliver of outcomes is more erratic is also relevant, suggesting that participants need extra support (or extra pressure) on how to deliver on the commitments made. This may be useful information for the UNGC, highlighting the need to define strategies to improve the delivery of outcomes. The initiative has been often criticised for not having the means to improve participants' performance. Therefore, being able to show participants' improvements in outcomes in the long run may be essential to protect the UNGC's legitimacy and ultimately survival.

# 1.3 Structure of the thesis

This thesis will be divided into seven chapters. Chapter one presents the conceptual development. An introduction to neo-institutional theory will be followed by an application of this theory to the explanation of institutional influences on corporate behaviour at different levels, from the firm to the global level. Chapter two presents the literature review. An overview of how the relationship between business and society evolved over time will be followed by a review of the concept of CSP, main theories used to explain it, how drivers for CSP have been tested empirically in the literature and a specific review on each one of the four empirical questions related to corporate involvement in voluntary CSR initiatives. Chapter three will present an overview of the methodology used in this thesis, including details on the choice of research strategy, design, and methods. Chapter four is the first empirical chapter, and addresses multilevel institutional influences on firms' decision to join voluntary CSR initiatives in general and the UNGC in particular. Chapter five follows, with an empirical study on the institutional influences on firms' speed of adoption of the UNGC. Chapter six focuses on performance on the UNGC principles, and empirically addresses the question of institutional drivers for firm performance. Finally, chapter seven looks into the UNGC as an institutional force aiming to shape firm behaviour, and seeks to understand to what extent sign up is associated with improved performance in the UNGC principles. A conclusion and final remarks close this thesis.

# 2 Chapter 1: Conceptual Development

A sizeable part of the literature on drivers of corporate social performance posits that CSP is largely driven by instrumental motives (Jackson and Apostolakou, 2010). Companies use adoption of such practices as a mean to manage reputational and other risks, protecting or improving financial performance. Other factors, however, may be at play and influence managerial decision in establishing firms' social, environmental and governance practices. An institutional perspective on corporate responsibility suggests that managers' decision making will not be purely instrumental, but actually framed within a broader social context in which they operate (Jackson and Apostolakou, 2010).

Institutional frameworks operate and affect corporate behaviour at several levels. Given increasing levels of globalisation, it is expected that firms may be subject to institutional demands <sup>1</sup> in transnational spaces. As companies' internationalisation has increased, a number of actors (NGOs, investors, multilaterals, among others) have mobilised in an effort to monitor and impose controls over corporate behaviour (Campbell, 2007). Such efforts have been particularly important in a scenario where greater corporate international mobility has created enormous challenges for national governments to regulate and control corporate behaviour (Campbell, 2007).

At the industry level, the literature suggests that firms operating in the same industry are exposed to similar challenges and institutional demands and therefore similar patterns and regulations on corporate responsibility are likely to emerge, leading to convergence in corporate social performance (Jackson and Apostolakou, 2010). It is posited that firms and their managers will consider peers' behaviour and community-accepted standards when deciding on their own strategies and actions in terms of CSP. Industry-level codes are also seen to lead to more isomorphic behaviour, by providing a benchmark for corporate action, offering incentives to conformity and creating peer pressure within the industry (Yang and Rivers, 2009). Empirical studies have found results in support of this, indicating, for example, a positive relationship between a firm's CSP and that of its immediate competitors (Beliveau et al., 1994).

At the individual level, several studies have explored the role of individuals, notably in their role as managers and executives, in influencing corporate social

<sup>&</sup>lt;sup>1</sup> Following Pache and Santos (Pache and Santos, 2010), institutional demands are defined as the various pressures for conformity that institutions exert on organisations.

behaviour. The central idea at this level is that individuals will interpret and make sense of the rules and the environment, prior to taking action. Factors such as individuals' values (Muller and Kolk, 2010), age (Waldman et al., 2006) and awareness in relation to corporate responsibility issues and initiatives (Weaver et al., 1999) are believed to have an influence in corporate social performance.

Finally, as important, is the influence of countries' institutional frameworks in the definition of corporate social performance (Chen et al., 2008b, Matten and Moon, 2008, Campbell, 2007, Jones, 1999). An institutional perspective suggests that different countries have different institutions, customary ethics and social relations, and that this leads to the development of different institutional frameworks at a national level (Matten and Moon, 2008). Companies' choices and decisions are not made in a vacuum, but rather they are made within this context or institutional framework. These different institutional frameworks will offer varied incentives and impose different controls and limitations on companies, therefore resulting in variations in corporate behaviour (ibid).

In the specific case of corporate social performance, Matten and Moon (2008) compare Europe and the US and argue that while the former's national business system creates the conditions for implicit CSP, i.e. business participation in the formal and informal institutions of society in order to address some societal interest, the latter has seen the emergence of explicit CSP, i.e. voluntary activities that aim at addressing some societal interest (Matten and Moon, 2008). Campbell (2007) also theorises that institutional demands at a national level can influence corporate social performance. The author (Campbell, 2007) proposes that companies will be more likely to behave responsibly if, among other factors, strong and well enforced state regulations are in place; if private, independent organisations exist and monitor corporate behaviour; if firms are engaged in institutionalised dialogue with unions and other stakeholders; and if normative calls for higher social responsibility are institutionalised in the firm operating environment, for example, through business schools. Chih et al (2010) tested Campbell's propositions in a sample of 520 financial firms in 34 countries finding, among other things, stronger legal enforcement, more cooperative employeeemployer relations and higher quality business schools to be related to higher CSP.

In view of these discussions, this thesis will focus on contributing to a greater understanding of drivers for corporate social performance from an institutional perspective. As highlighted by several scholars, this remains an understudied

area in the field of business and society (Aguilera, 2007, Campbell, 2007). This chapter has two main sections. The first section will review the relationship between institutions and organisations in general. Here will be reviewed definitions of institutions, the way institutions behave, processes of institutionalisation and the role of individual agency in responding to institutional demands. This first section aims at establishing the ground for the conceptual development. Having established how institutions shape organisational behaviour in the first section, the second part will focus particularly at how these pressures shape corporate behaviour at different levels.

# 2.1 Institutional theory and organisations

This first section will provide an introduction and discussion of key concepts and ideas of institutional theory that will frame and define the theoretical underpinning of this thesis. It starts with an introduction to neo institutional theory followed by a discussion on what are institutions and how they behave. It then discusses the idea that despite transmitting the idea of stability and resilience, institutions are also prone to incremental or radical change. To this follows a discussion on how institutions may shape organisational behaviour, and finally an appreciation of a role for agency of individuals and organisations in reacting to institutional demands.

Scott (2008) identifies three main streams in current work about the relationship between organisations and institutions. The first one suggests a game analogy, positioning institutions as the "rules of the game" and organisations as "players" of this game. This stream, adopted by many institutional economists and most notably developed by Douglas North, focuses mainly on rule-setting and enforcement (Scott, 2008). The second strand identifies organisations as institutions themselves. While some theorists in this strand focused on the regulatory pillar, seeking to understand the impact of "background conditions" (such as property rights, contract law, among others) on the economic organisation of individual firms, others focused on the normative pillar, studying how firms develop unique character structures over time that constrain or enable behaviour in accordance with their values (Scott, 2008). The third strand focuses on the cultural-cognitive pillar, and understands the modern organisation as a key institutional form in modern society. For these scholars, rationalised organisational practices are cultural, following modern culture focus on rationality (Scott, 2008). Although social scientists identified and studied institutions quite early, the study of organisations as a specific type of social form started much later with its origins dating back to the period around the 1940s (Scott, 2008). DiMaggio and Powell (1991) add that the focus on new institutionalism in organisational studies dates from 1977, when John Meyer published two seminal papers in this field.

# 2.1.1 Introducing neoinstitutional theory

Early institutional theorists working between 1880s and mid-1900s developed important ideas that were later expanded or re-interpreted by contemporary scholars. Their ideas offered often a reaction against a constant debate between the extent to which individuals are able to make independent rational choices versus the extent to which these decisions are constrained and shaped by the environment within which the individual exists. All of them shared a common limitation though – they focused little attention on organisations and their role as institutional forms (Scott, 2008). The way in which institutions influenced groups of organisations has also been underexplored by these theorists (Scott, 2008). It was only during the 1940s and 1950s that theorists began to understand the relevance of particular groups (individual organisations), and the different role they played when compared to broader social institutions and individuals (Scott, 2008).

Selznick is a leading early figure in institutional analysis of organisations. From the beginning, Selznick aimed at distinguishing between organisations as a mechanism designed to attain specific goals and organisations as an organic system that can be influenced by the characteristics of its participants as well as by pressured exerted by its environment (Scott, 2008). This scholar posited that actions are not context free but rather have their outcomes moulded by the environment in which they exist (Scott, 2008). Selznick also argued that institutionalisation is a process that happens over time, building on the organisation's history and people. At the point when organisations become infused with value beyond what is technically required for the completion of tasks, the organisation is no longer seen as expendable and all efforts are made to maintain it (Scott, 2008).

Neoinstitutionalism, although rooted in Selznick's ideas, diverges from this tradition in several ways (DiMaggio and Powell, 1991). In common, "old" and "new" institutionalism share a scepticism in relation to an atomistic rational-actor model of organisations, understand institutionalisation as an state-dependent process that limits organisational choice, emphasise the relationship between

organisations and their environment and draw attention to the role of culture in shaping the reality of organisations (DiMaggio and Powell, 1991).

New and old institutionalisms diverge in a number of aspects though. For one thing, they have different understandings of what constitute sources of constrain to organisational behaviour. While the old placed emphasis on power relations and vested interests, the new institutionalism focuses on the imperative of legitimacy (DiMaggio and Powell, 1991). They also diverge on the understanding of environment. While old institutionalism focused on organisations embeddedness in local communities, new institutionalism also advances the idea of non-local environments, concentrating on organisational fields, whose boundaries roughly correspond to professions, industries or national societies (DiMaggio and Powell, 1991). Environments are here believed to penetrate organisations and define the lens through which actors view the world.

Another interesting distinction builds on the varying notions of environment, and concerns the process of institutionalisation. Old institutional theory understood the institutionalisation process as more confined to a particular organisation, representing its efforts to adapt to its local environment. Neoinstitutional theory, on the other hand, sees institutionalisation as an inter organisational process, tending to reduce diversity in local environments (DiMaggio and Powell, 1991). Finally, both discredit the idea of an organisation as a sum of individual actions. However, neoinstitutionalism stresses that individual action is mainly unreflective, based on taken-for-granted ideas and routines; for these scholars, institutions shape actors and their interests. Old institutionalism, on the other hand, could accept that actors had and pursued material and ideal objectives, even though scholars did not agree with the idea that individual striving will lead to organisation rationality (DiMaggio and Powell, 1991).

There are several strands of new institutionalism - in economics, organisation theory, history, and sociology, among others. Based on different assumptions and focusing on diverse social phenomena, these strands have little in common, but a conviction that institutional frameworks and social processes matter and a scepticism towards an atomistic view of social dynamics (DiMaggio and Powell, 1991). Neoinstitutional economics focuses on transactions as the unit of analysis and posits that institutions arise and persist when they are able to reduce transaction costs. Several unresolved issues remain within this strand though, for example: how optimal institutions are as responses to social needs,

the weight of the state and ideologies and the treatment of transaction costs (DiMaggio and Powell, 1991).

In the field of politics, two major strands of new institutional theory emerged: the positive theory, concerned with domestic political institutions, and the regime theory, focusing on international relations (DiMaggio and Powell, 1991). The positive theory of institutions concentrates on how political structures, i.e. institutions, shape political outcomes. Scholars in this field argue that political institutions contribute to create stability in political life, for example, by reducing the volatility inherent to majority voting system through legislative rules. International regime scholars investigated conditions under which international cooperation occurs and studied the institutions, i.e. regimes, which promoted this cooperation. Regimes are considered institutions because "they build upon, homogenise, and reproduce standard expectations and, in doing so, stabilise the international order" (DiMaggio and Powell, 1991: 7).

In summary, neoinstitutional theory informs some key assumptions and the theoretical background that will frame this conceptual piece. This thesis emphasises the relationship between organisations and their environment, rejecting a purely atomistic rational-actor model of organisations. It also considers institutional frameworks and demands to have an important role in shaping corporate behaviour, by offering incentives or imposing constraints to certain behaviour.

# 2.1.2 What are institutions?

Scott (2008: 48) proposes that institutions "are comprised of regulative, normative and cultural-cognitive elements that, together with associated activities and resources provide stability and meaning to social life". He adds that institutions function at multiple levels, from the global system to personal relationships (Scott, 2008) and are shaped by and shape social behaviour (Scott, 1995). Another important feature of institutions is that although stable by definition, they can change over time, either in an incremental or discontinuous way (Scott, 2008).

Institutions are comprised by symbolic systems (norms, rules and cultural-cognitive beliefs), as well as by the activities that produce and reproduce them and the resources that sustain them (Scott, 2008). Summarising:

- Institutions can constrain behaviour, by distinguishing legitimate and illegitimate conduct and by defining legal, moral and cultural boundaries, or enable behaviour, by providing guidelines or by empowering actors;
- Institutions operate at different levels, from the global system to interpersonal relations;
- Although institutions transmit the idea of stability, they can also go through change, either radical or incremental;
- Institutions have different carriers and can be instantiated in different media.

In other words, institutions are multifaceted systems, comprising regulative processes and symbolic systems, the latter formed by cognitive constructions and normative rules. Scott adds that "rules, norms and meanings arise in interaction, and they are preserved and modified by human behaviour" (Scott, 2008:49).

# 2.1.3 How do institutions behave?

DiMaggio and Powell (1983) identify three mechanisms of institutional isomorphic change, namely: coercive isomorphism, normative pressures and mimetic processes. In a similar vein, Scott (2008) proposes that institutions are formed by three pillars, namely regulative, normative and cognitive. The table below summarises the main characteristics of the three pillars of institutions shedding light on the way institutions function:

Table 1: The three pillars of institutions (Scott, 2008: 51)

	Pillars		
	Regulative	Normative	Cognitive
Basis of compliance	Expedience	Social obligation	Taken-for- grantedness, shared understanding
Basis of order	Regulative rules	Binding expectations	Constitutive schema
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, laws, sanctions	Certification, accreditation	Common beliefs, shared logic of action, isomorphism
Affect	Fear guilt/innocence	Shame / honour	Certainty / confusion
Basis of legitimacy	Legally sanctioned	Morally governed	Comprehensible, recognisable, culturally supported

These elements form "the elastic fibres that guide behaviour and resist change" (Scott, 2008: 49). While these pillars or mechanisms are analysed separately here, it is important to highlight that most empirical observations will identify not an isolated pillar in action, but a combination of different elements (DiMaggio and Powell, 1983, Scott, 2008). Also importantly, the pillars may not always be aligned, and may sometimes generate concomitant incentives for conflicting behaviours, creating confusion and in some cases providing conditions prone to institutional change (Scott, 2008).

It is also important to note that, depending on time and circumstances, the supporting pillar of an institution may change. For example, while laws are mainly understood to be in the realm of the regulative pillar, based on their coercive elements, cognitive and normative elements may be required to support them in some cases. In several instances, laws are sufficiently ambiguous not to state a clear prescription for action, in which case actors are required to elaborate their own interpretation of those requirements. In these cases, laws offer an opportunity for collective sense-making, relying more on cognitive and normative elements, than coercive ones per se (Scott, 2008). In addition, these different mechanisms may be at play concomitantly (DiMaggio and Powell, 1983). It is important to explore the three pillars in more detail.

# 2.1.3.1 The regulative pillar: isomorphism through coercive mechanisms

The regulative aspects of institutions are to a greater or lesser extent observed by all institutional scholars (Scott, 2008). The central concept around this pillar is that institutions regularise and constrain behaviour. This process involves the capacity to establish rules, monitor compliance and apply sanctions (Scott, 2008), and control is mainly done through mechanisms of coercion (DiMaggio and Powell, 1983). The operationalisation of this process may be highly formalised and implemented by specialised actors, or it may use informal mechanisms and involve folkways (Scott, 2008, DiMaggio and Powell, 1983). Coercive pressures are generally proposed to stem from actors upon whom the organisations depend (DiMaggio and Powell, 1983).

Where actors do not have the authority to impose conformity, they may choose to offer incentives for compliance (Scott, 2008). In Brazil, for example, the government incentivizes corporate investment in cultural activities by offering tax

incentives for companies participating in the scheme <sup>2</sup>. Also importantly, DiMaggio and Powell (1983) highlight that while coercive power is often associated with the state, the imposition of rules and standards through coercive mechanisms may also take place outside the government arena, for example, between parent company and subsidiaries.

# 2.1.3.2 The normative pillar: normative pressures for isomorphism

The normative pillar concentrates on a prescriptive, evaluative and obligatory focus on social life. A normative system is formed by values and norms; while the former defines socially accepted and desired behaviours, as well as standards to which existing behaviours can be compared, norms will define the acceptable means to achieve them (Scott, 2008). For example, while values can define the legitimacy of profit, norms will define what is considered appropriate behaviour to achieve profit.

Normative systems also support the emergence of roles. While some values and norms apply to society in general, others will be specific to certain actors or positions, defining what consists appropriate goals and behaviours in these particular cases (Scott, 2008). These normative external expectations are held by other participants of the social interaction in case, and will prescribe behaviour for the individual that holds the particular position (ibid). The individual will experience these expectations as external pressures to conform, and internalise them to varying degrees. It is important to highlight that roles can be formally constructed, to respond to a specific need, or informally constructed, through repeating interactions over time (Scott, 2008).

DiMaggio and Powell (1983) argue that normative pressures stem primarily from professionalisation. According to these authors, isomorphism is enacted through two key aspects of professionalisation: first, through formal education and legitimation through the development of a cognitive base by specialists at universities or training centres; secondly, through interactions within professional networks. While the former is an important source for the development of professional norms to be followed by members of that profession, the latter touches professionals in similar roles across several organisations and offer a valuable conduit for the diffusion of models and ideas, and for the definition of organisational behaviour (DiMaggio and Powell, 1983).

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<sup>&</sup>lt;sup>2</sup> For more information please refer to: http://www.cultura.gov.br/site/categoria/apoio-a-projetos/mecanismos-de-apoio-do-minc/lei-rouanet-mecanismos-de-apoio-do-minc-apoio-a-projetos/

As it is the case of the regulative pillar, normative systems can either constrain or enable behaviour (Scott, 2008). As Scott (2008) highlights, normative systems "confer rights as well as responsibilities; privileges as well as duties; licenses as well as mandates". Differently from the regulatory pillar, compliance is based on social obligation.

# 2.1.3.3 The cultural-cognitive pillar and mimetic processes

The cultural-cognitive elements of institutions are defined by Scott (2008: 57) as "shared conceptions that constitute the nature of social reality and the frames through which meaning is made". Individual's responses to external stimuli are mediated by cognitive and cultural frameworks, which help the actor make sense of the world around him, interpret it and decide how to behave (ibid).

DiMaggio and Powell (1983) stress the power of uncertainty in leading to isomorphism. In face of ambiguity and doubt, organisations are likely to engage in mimetic processes, modelling themselves after peer organisations that are seen by them as more successful or legitimate. This modelling process may be unintentional, for example through employee turnover, or intentional and explicit, for example through the work of consulting firms in replicating models across client firms (DiMaggio and Powell, 1983).

Scott (2008) stresses a cognitive-cultural pillar, arguing that "internal interpretative processes are shaped by external cultural frameworks". He argues that compliance in the cultural-cognitive pillar is achieved as individuals perceive alternative behaviours to be inconceivable and take routines for granted. Compliance is often associated with feelings of certitude, confidence and connection to one's environment; non-compliance, on the other hand, is linked to feelings of confusion and disorientation (Scott, 2008).

# 2.1.3.4 Carriers

Institutions are conveyed by different carriers, which Scott (2008) calls symbolic systems, relational systems, routines and artefacts. Two important aspects of carries must be highlighted: (1) they apply to all pillars, although different authors will focus on different carriers; and (2) carriers are not neutral modes of transmission, but rather are able to affect the message's reception and interpretation (ibid).

**Symbolic systems -** Institutional scholars are interested in a variety of symbols used to guide behaviour, such as for example rules, values, scripts, representations, classifications, etc. Scholars emphasising the cognitive pillar

are interested in how symbolic systems can shape perception and understandings. Those focusing on the normative pillar, concentrate on how values and expectations shape behaviour, while regulative scholars are interested in the effect created by conventions, laws and rules (Scott, 2008). Human language, followed by writing and more recently by advances in communication technology through internet and TV for example, greatly facilitated the transmission of ideas across time and places (Scott, 2008).

Relational systems – Institutions can also be carried by relational systems, i.e. patterned interactions connected to role systems (Scott, 2008). Relational systems may exist within an organisation, or across the boundaries of different organisations. They may also be common to several organisations creating structural isomorphism, or specific to a single organisation creating a singular organisational character structure (Scott, 2008). While cognitive theorists will tend to focus more on structural models, normative and regulative scholars will be inclined to understand relational systems as governance systems, with the normative authority and the coercive power to create and enforce rules, codes and norms (Scott, 2008).

Routines – Routines, as "deeply ingrained habits and procedures based on unarticulated knowledge and beliefs" can also function as institutional carriers, and have been pointed by scholars as a key element to ensure organisational reliability and stability (Scott, 2008: 82). Routines involve acquiring knowledge on how to act and solve problems, developing patterned behaviours, and are typically learnt within a specific community; that implies in that routines are not easily transposable to different settings where new actors or relationships are involved (Scott, 2008).

Artefacts – Artefacts can be defined as "discrete material object, consciously produced or transformed by human activity, under the influence of the physical and/or cultural environment" and range through human history from very rudimentary tools to complex contemporary technologies (Scott, 2008: 83). Artefacts have both technical and symbolic features, the latter in some cases extrapolating the former (for example, goal posts in the football match). Finally, it is important to highlight that although artefacts are often a product of human invention, once developed and in use, they seem to become part of the objective reality of a specific situation; that does not mean, however, that they are immutable – through social use and interaction the meaning and use of artefacts can be modified (Scott, 2008).

# 2.1.4 How do institutions change?

Institutions, although transmitting the idea of stability and resilience, are also prone to incremental or radical change; therefore, it is important to understand them not only as a state of things, but also as a "process", including institutionalisation and deinstitutionalisation (Scott, 2008). Scholarly understanding on the emergence or change in institutions varies, but can be roughly classified in two strands: naturalistic and agent-based (Scott, 2008). While the first posits that institutionalisation is a natural and unquided process arising from the collective sensemaking of actors facing similar issues, the latter stresses the importance of actors as causal agents, who engender intentional action to achieve their ends. A balanced view, taking account of both agency and structure in the process of institutionalisation, seems the most sensible approach (Scott, 2008).

Scott (2008) suggests that at the early stages of institutionalisation, the adoption of the specific practice by an organisation is largely an issue of choice, which varies according to their needs or interests. As the process of institutionalisation advances, increasing cognitive and normative pressure make adoption more of a requirement than a choice. The question then arises as of why certain organisations adopt some structures and practices, while others in similar situations do not? What drives variation in processes of institutionalisation? As a first point, Scott (2008) proposes that although exposed to the same institutional demands, not all organisations active in the same environment will experience these pressures equally. The reasons for that vary. For one thing, these organisations are not equally subject to existing institutional demands. Regulatory requirements may vary as a function of size; for example, regulation on inclusion of people with special needs may apply only to firms that have more than a certain number of employees. In addition, Oliver (1991) proposes that conforming is not the only available choice for an organisation faced with institutional pressures. Possible responses vary according to the level of resistance to institutional demands and may range from acquiesce, to manipulation compromise, avoidance, defiance and (Oliver, 1991). Organisations' willingness, capacity and ability to conform will drive their response to the institutional demands.

Organisational factors are also understood to be linked to early adoption. Scott (2008) divides these factors in three groups, namely attributes, linkages and reference groups. Attributes refer to organisational characteristics that can

influence early adoption, of which these are some that have been found to be relevant: size, as larger organisations are more resourceful, more visible and more sensitive to environmental changes; work with the public sector; level of unionisation; and CEO characteristics, such as background, compensation, structure, power in relation to the board or incentives systems (ibid). Linkages refer to inter-organisational connections shared by organisations' participants within networks, such as for example, interlocking board of directors (ibid). It is theorised that where information is readily available, the diffusion of adoption of a certain practice is more likely to be influenced by the behaviour of others we found to be similar to ourselves (a case of structural equivalence) than by those we maintain contact with (a case of cohesion). Reference groups refer to the choice by an organisation of similar organisations to mimic. Studies show that organisations tend to choose their references based on geographic proximity; perception of being similar to self, for example, belonging to the same industry; closeness of connections; high prestige; level of success (Scott, 2008).

Institutional change involves, however, not only processes of institutionalisation, but also processes of deinstitutionalisation. Deinstitutionalisation happens when the utility or legitimacy of a certain institutionalised practice is seriously questioned, leading to the weakening and eventual substitution of institutions (Oliver, 1992). Oliver (1992) identifies three main areas of pressure within and beyond an organisation which will determine deinstitutionalisation, namely: political, functional and social. Political pressures derive from changes in the power structures that gave rise or sustained institutions. Functional pressures result from perceived performance failures on institutionalised practices or from changing consumer preferences. Finally, social pressures are associated with increasing fragmentation of normative consensus and the consequent creation of divergent beliefs and practices, weakening the "competing" institutional frameworks.

# 2.1.5 How do institutions shape organisational behaviour?

According to institutional theory, institutions will help establish what constitutes acceptable and appropriate behaviour and impose restrictions or sanctions on behaviour that falls outside of these "boundaries" (Scott, 2008). As a result, institutional demands will influence the structure and the behaviour of organisations operating in a certain environment. Organisations will acquiesce to prescriptions advanced by institutional norms, rules, values or beliefs, aiming to "fit" the expectations of their operating environment (Dacin, 1997) and acquire

legitimacy, i.e. be perceived as following socially accepted goals in a socially accepted manner (Ashforth and Gibbs, 1990).

Legitimacy requirements may pressurize organizations to adopt certain structures or practices which, although not necessarily improving efficiency, conform to institutional demands (DiMaggio and Powell, 1983, Vaughan, 1999). The result is increasing similarity within the environment through processes of institutional isomorphism. Organisations active within the same institutional environment will face similar constrains and conditions, and therefore will tend to be isomorphic to one another and to their environment over time (Dacin, 1997).

# 2.1.5.1 Why do firms engage on a quest for legitimacy?

Why would firms be interested in acquiring legitimacy? Why would they accept to engage in behaviour that may at times sacrifice their ultimate objectives of efficiency and profit to acquire legitimacy? Organisations need more than material resources and technical information to thrive in their social environment (Scott, 2008). Organisations also need social acceptability and credibility, a concept that sociologists call legitimacy. Legitimacy has gained prominence in management studies since the late 1960s, when open system and institutional theories have started to change the notion that the organisation is a tightly bounded entity clearly separated from its surrounding environment (Suchman, 1995).

For the purposes of this work, Suchman's definition of legitimacy was used, namely that "legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995:574). Therefore, an actor's behaviour is considered legitimate when it is seen to be socially appropriate and consonant with accepted rules, norms, values and beliefs (Sonpar et al., 2010) and represent the endorsement of an organisation by relevant social actors (Deephouse, 1996).

What is the gain for firms from engaging in activities and behaviours that aim at acquiring legitimacy? Legitimacy arguably not only reduces need for cognitive processing by managers, as institutional norms and values are taken for granted, but more importantly ensures the support and access to resources provided by key stakeholders and ultimately supports organisational continuation and survival over time (Sonpar et al., 2010). Ashforth and Gibbs (1990) add to this that when a firm is granted legitimacy, it is also granted a "stock of goodwill"

which can protect it from future legitimacy threats. In other words, the firm is allowed to occasionally deviate from social norms, rules or values without seriously damaging its status (Ashforth and Gibbs, 1990). Scott (2008), in a review of a number of empirical studies, advances that organisations that have culturally approved format and activities, are granted support from normative authorities and approval from legal bodies, are more likely to survive over time, as compared to organisations lacking these legitimating elements. In other words, acquiring legitimacy is an important feature for organisation viability and continuity.

Fombrun et al (2000) illustrate the benefits of acquiring legitimacy with a 1999 example of Coca-Cola. At that occasion, the company faced a race-bias suit put forward by a group of employees. The company, however, received support by black community leaders, who highlighted Coca-Cola's strong record of citizenship activities in benefit of black colleges (Fombrun et al., 2000). The end result was positive publicity to Coca-Cola, praising and profiling its citizenship programmes (ibid) - the previously acquired legitimacy protected the company when a threat to its legitimacy occurred. A quote from a Shell executive, in the context of the impacts of the Brent Spar incident and the execution of the Wiwa leader in Nigeria, also illustrates the relevance of legitimacy for firms: "...There is a real concern for legitimacy and what the community thinks. There is a fight for the hearts and minds of the public; this is a long-term force affecting our business" (Levy and Kolk, 2002: 290).

It is important to remember, though, that legitimacy involves a relationship between the organisation and its environment, rather than being a "possession" of an organisation (Suchman, 1995). This relationship is dynamic and as such subject to change over time. This dynamism is compounded by the fragmented nature of certain institutional environments, which may create multiple and conflicting demands, leading to further instability and threat to the organisation legitimacy. As a result, organisations need to focus not only on gaining legitimacy, but also on maintaining legitimacy and at times repairing legitimacy (Suchman, 1995).

# 2.1.5.2 How do firms acquire or maintain legitimacy - different sources of legitimacy?

Bases of legitimacy differ across the three pillars, each presenting different requirements for companies to be conferred legitimacy. The regulative pillar emphasises compliance to the relevant legal or quasilegal requirements (Scott, 2008). To accrue legitimacy, organisations need to comply with the explicitly

defined requirements of the regulatory system (Kostova and Zaheer, 1999). This could be illustrated, for example, by the implementation of a new environmental regulation. If a company decides not to comply, it will arguably suffer sanctions and have its legitimacy challenged by social actors questioning the extent to which the firm's objectives are congruent with society's ones. Another example of this is corporate philanthropy in the United States. Although business leaders in the United States have a long tradition of philanthropy, it was not until the Revenue Act of 1935 that companies started making charitable contributions (Coffey and Wang, 1998). This court decision legitimised corporate giving, opening the way for companies to legitimately engage in such activities (Coffey and Wang, 1998).

Legitimacy can also be associated with desirability and normativity, through a normative perspective, or it can be associated with taken for grantedness, from a cognitive perspective (Deephouse, 1996). The normative pillar relies on deeper moral judgements to assess legitimacy (Scott, 2008), entering the domain of social values (Kostova and Zaheer, 1999). To be legitimate, organisational values need to be seen as being congruent to wider societal values (Kostova and Zaheer, 1999). Finally, cultural-cognitive forces require conformity to shared frames of reference or mutually recognisable template (Scott, 2008). Legitimacy accrues from conforming to or being consistent with cognitive structures in society (Kostova and Zaheer, 1999). Compliance in this pillar is achieved as individuals perceive alternative behaviours to be inconceivable and take routines for granted (Scott, 2008). It is important to highlight though that the three pillars are not necessarily independent and one may influence the other. For example, values may impact cognitive categorisation and as a result influence regulation (Kostova and Zaheer, 1999).

In a study of the cattle industry in California, Elsbach (1994) noted how firms employed references to institutional characteristics<sup>3</sup> to protect legitimacy when responding to controversial events. In the early 1990s, despite the size and financial strength of its industry, California cattle organisations faced several threats to their legitimacy, including public criticism over the use of hormone in cattle and the possible health implications, excessive use of water and contamination of underground water by cattle manure, grazing on public lands and inhumane treatment of cattle (Elsbach, 1994). Some activist groups had

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<sup>&</sup>lt;sup>3</sup> Institutional characteristics are here defined as normative and socially accepted organisational practices associated with institutional structures (hierarchies and goals seen as legitimate), procedures (rules and processes seen as legitimate), goals (goals and outcomes seen as legitimate), and structural decoupling of legitimate and illegitimate structures (Elsbach, 1994).

even started the "Beyond Beef Coalition" which claimed beef cattle to be one the greatest ecological threats on Earth and aimed at cutting beef consumption by half by 2002. There seemed to be a strong perceived discrepancy between some of society's goals and expectations and that of the cattle organisations.

Cattle firms in the study were found to resort to institutional characteristics as means to respond to threats to their legitimacy. One of the studied firms focused on institutional structure, highlighting that its Total Quality Management Department would meet or exceed the US Department of Agriculture guidelines (Elsbach, 1994). As highlighted by Fombrun (2005), the "more widely accepted the label or standard, the more the company can claim legitimacy in complying with prevailing 'best practice'". In an example of institutional goals, an organisation praised the positive economic impact of the industry in the region (Elsbach, 1994), arguably implying that economic prosperity was a common objective of both the company and the community. Focusing on institutional procedures, one of the firms claimed that grazing limits were determined by the State, while another highlighted that government inspectors oversaw all production in order to ensure compliance with food safety standards. Finally, in a case of decoupling, a firm blamed other stakeholders unrelated to the industry for the environmental degradation in the area. In all cases, firms seemed to position the use of widely accepted and endorsed structures and procedures as a proof of their legitimacy, seeking to avoid further questioning and ensure continuation (Elsbach, 1994).

# 2.1.5.3 Who has the authority to assign legitimacy?

Considering that legitimacy results from the endorsement of an organisation by certain actors, it is important to understand who the latter are. Theory proposes that only certain actors within the greater scope of relationships a firm is engaged on have the power and authority to confer legitimacy (Deephouse, 1996). In addition, it is also theorised that who these actors are can vary over time (Scott, 2008). Scott proposes that in contemporary society governments as well as professional and trade associations are key to organizations (Scott, 2008). Another important actor is public opinion, who has a strong influence in defining standards of acceptability (Deephouse, 1996). As highlighted by Greening and Gray (1994), media also has an impact in confirming or eroding the legitimacy of a firm. Given this diversity of actors, one can anticipate some challenges. Different actors may have different priorities and therefore pose distinct and even conflicting demands over the firm for legitimacy to be assigned. What would organisations do then, when facing competing sovereigns?

## 2.1.5.4 What do firms do when facing competing sovereigns?

Different actors, as well as different pillars, may have conflicting requirements for conferring legitimacy. Scott (2008: 60) highlights that sometimes different actors will have conflicting normative requirements and standards to confer legitimacy: "in complex situations, individuals and organizations may be confronted by competing sovereigns". In these cases, organizations may have difficulty in taking action given that conforming to one standard may imply in non-conformity to the other one (Scott, 2008).

The conflicting demands of competing sovereigns can be illustrated by the issues around firms' decision to engage in activities associated with corporate social performance. While in many cases a business case for CSP can be made, even in the short term, in other cases, compliance to higher social and environmental standards may only pay on the long (or extremely long) term. It may also happen that firms are not able to see the financial return for such action. In those cases, firms may find themselves dealing with conflicting logics. More importantly, firms may find that ensuring legitimacy with one actor may compromise its legitimacy with another (perhaps equally) important actor. For example, firms can be caught in situations of conflict between shareholder interests for higher returns and NGOs call for voluntary implementation of higher environmental standards to reduce climate change impacts.

If "competing sovereigns" can be found within the same social and geographical environment, what to say of actors seeking to ensure legitimacy across different regions? Challenges for MNCs, for example, are compound by the diversity of norms, beliefs, rules and values across their multiple host environments (Kostova and Zaheer, 1999). An institutional perspective suggests that firms will seek to acquire legitimacy by becoming isomorphic with its operating environment. Therefore, the greater the extent of which operating countries institutional environments differ from one another, the greater the challenge for the firm to ensure legitimacy through isomorphism (Kostova and Zaheer, 1999). In addition, the greater the institutional distance between home and host countries, the greater the difficulty to understand and interpret local institutional requirements. Firms' structures, practices and policies generally reflect the institutional environment in which they were developed; therefore it would be arguably more difficult for a MNE to make sense and adapt to an institutional framework which differs significantly from the one in its home country (Kostova and Zaheer, 1999).

In summary, reducing isomorphism to the result of a single institutional pressure would be too simplistic and ignore the full extent of societal complexity (Scott, 2008). Organisations are often exposed to multiple, multilevel and multifaceted institutions, making it at occasions impossible to conform to all. In addition, conforming is not the only option, and firms may decide to do otherwise (Oliver, 1991). The variability in organisations' response to institutional demands has been pointed as a topic of interest for research within the neoinstitutional theory (Özen and Küskü, 2009). This will be further explored in the section below.

# 2.1.6 A role for agency?

Institutional theory advances the notion of stability, suggesting that "behaviours are patterned and reproduced because social norms become taken-for-granted" (Greenwood and Suddaby, 2006: 28). While it is widely acknowledged that organisations will tend to fit into prescriptions of appropriate behaviour there is also growing interest in understanding actors' impact in those very same institutions in which they are embedded (Greenwood and Suddaby, 2006). This discussion is not new - the agency versus structure debate has been continuous in the social sciences. The tension between "freedom and control", between individuals' ability to act and limitations imposed on their action by structural and cultural constrains is an ongoing debate (Scott, 2008). Theorists have found different solutions to address this apparent dichotomy.

Reed (2003) identifies four major attempts to clarify this relationship: reductionism, determinism, conflation and relationism. The reductionism approach reduces collective units to an aggregate of individual constituents, explaining social action and the social structures they reproduce as an outcome of individual behaviour. Within organisation theory, this approach can be clearly identified on rational choice theory, decision making theory and public choice theory (Reed, 2003). Determinism values structure over agency, almost disregarding the latter completely. In this approach, agency is understood as an outcome of underlying structural imperatives, merely reproducing the status quo (Reed, 2003). Conflationism, on the other hand, argues for the mutual and equal co-determination of agency and structure. This approach, tends, however, to internalise structure, dissolving or hiding the complex interplay between agency and structure (Reed, 2003). Reed suggests that relationism seeks to address the weaknesses of the previous approaches. Relationism equally values structure and agency, and argues for the need to maintain the ontological and analytical separability of these two constructs in order to be able to assess the

degree to which different social and organisational structures are open to change through social action (Reed, 2003).

Giddens (1984) advanced the theory of *structuration* to address the interplay between these forces. The structuration theory proposes that actors are knowledgeable and reflexive, and create and follow rules and use resources, "as they engage in the ongoing production and reproduction of social structures" (Scott, 2008: 77). Agency then refers not to actors' intention of doing something, but to their capacity of doing them (Giddens, 1984). Scott highlights that whatever the conceptualisation of the social actor, be it following a rational-choice model, presupposing fixed preferences, or looking into individuals, with ever changing interests and taste – the possibility of changing institutional arrangements exist (Scott, 2008).

While early institutional theory considered actors' agency, later this literature tended to neglect this discussion (Lawrence et al., 2011), focusing mainly on the role of exogenous shocks in institutional change (Battilana et al., 2009). These shocks may happen in the form of regulatory change, social turmoil, technological disruptions, among others, resulting in a disturbance of existing consensus, and allowing for the awareness of alternative logics and the possibility of change (Greenwood and Suddaby, 2006).

Endogenous sources of change, however, should also be taken into consideration. A concept that supports the understanding of endogenous change is that of institutional entrepreneurship. Institutional entrepreneur is the actor "who initiate changes that contribute to transforming existing or creating new institutions" (Battilana et al., 2009: 66). This concept was first introduced by DiMaggio in the 1988 work on interest and agency in institutional theory (Battilana et al., 2009). It helps explain the role of actors (individuals or organisations) in promoting institutional change, despite institutional pressures towards stability and continuity (Battilana et al., 2009).

Institutional entrepreneurs may be individuals or organisations, or yet groups of organisations or groups of individuals (Greenwood and Suddaby, 2006, Battilana et al., 2009). Battilana et al (2009) also propose that in order to be considered institutional entrepreneurs, social actors must not only initiate divergent change (i.e. change that transform a field's institutional logic, which is the understanding of goals in that field and how they should be pursued), but also have an active role in the implementation of these changes.

This concept encounter one of the main challenges in institutional theory - the "paradox of embedded agency" (Greenwood and Suddaby, 2006). Reflecting the tension between institutional determinism and agency (Battilana et al., 2009), this brings to light the discussion on how actors whose behaviour and thoughts are constrained by institutions are capable of working to promote some change to those very same institutions (Zietsma and Lawrence, 2010). In addressing this debate, authors have proposed that certain enabling conditions may facilitate the emergence of institutional entrepreneurship. Battilana et al (2009) propose two categories of enabling conditions: field characteristics and actors' social position. The former may take different forms: shocks and crises such as technological disruption or social turmoil; acute field-level problems that may lead to crises, such as for example scarcity of resources; higher degree of heterogeneity, which may give rise to institutional incompatibilities and internal contradictions likely to lead to questioning of the status-quo; and lower degree of institutionalisation, which is likely to lead to uncertainty and opportunity for strategic action and reflection (Battilana et al., 2009). The latter suggests that actors' social position may influence their perception of the field as well as their access to resources necessary for institutional entrepreneurship (Battilana et al., 2009).

While an endogenous view on the role of actors in affecting institutions has been more explored through the lenses of institutional entrepreneurship (Lawrence and Suddaby, 2006), the concept of institutional work is also relevant. Institutional work is the "purposive action of individuals and organisations aimed at creating, maintaining and disrupting institutions (Lawrence and Suddaby, 2006: 215)" or changing them (Lawrence et al., 2011). Lawrence and Suddaby (2006) argue that practices leading to institutional change go beyond those of institutional entrepreneurs, requiring institutional work from a large number of social actors, including those that have the resources to be entrepreneurs, and those whose actions will support or facilitate the proposed change. Lawrence et al (2011: 52) also add that besides the grand account of institutions and agency, it is also important to consider the relevance of "day-to-day equivocal instances of agency that, although aimed at affecting the institutional order, represent a complex melange of forms of agency - successful or not, simultaneously radical and conservative, strategic and emotional, full of compromises, and rife with unintended consequences".

Lawrence and Suddaby (2006) propose that Oliver's (1991) article on strategic responses to institutional processes and (1992) article on deinstitutionalisation

represent important steps in the recognition of agency in institutional theory and focus on institutional work. Organisations in the same organisational field may be subject to the same institutional demands; however, not all of them experience it in the same way; likewise, not all organisations will respond to these pressures equally (Scott, 2008). Oliver (1991) suggests that conforming is not the only possible response that companies may have to institutional demands and proposes a typology of strategic responses to those pressures. These responses vary according to the level of resistance to institutional demands, and range from acquiescence, to compromise, avoidance, defiance and finally manipulation. Oliver (1991) theorises that organisations' willingness and ability to conform will drive organisational responses to institutional demands. While the former will be bounded by organisation scepticism, political self-interest and organisational control, the latter relates to organisational capacity, ability and awareness (Oliver, 1991). The author hypothesises then the conditions under which companies will be more likely to resist to institutional demands, looking into each predictive factor related to cause, constituents, content, control and context of institutional demands (Oliver, 1991). Clemens and Douglas (2005) empirically tested Oliver's framework, studying the steel industry and the issue of potential changes to the standards for radioactive contamination of scrap steel. Their results indicated overall support to Oliver's framework.

While much of the discussion on agency may have been centred on institutional change, it is important to remark that even the highly institutionalised practices and structures depend on individuals' and/or organisations' actions to be maintained overtime (Lawrence and Suddaby, 2006). The concept of institutional work highlights and supports this idea. Lawrence and Suddaby (2006) stress that this should not be understood as a simple absence of change, as maintaining institutions also requires significant efforts by actors. This may involve, for example, establishing techniques to socialise new members or incorporating changes that occurred in the external environment to current practices and routines. In other words, the focus is then in understanding how social actors work to maintain stability in the face of change (Lawrence and Suddaby, 2006).

In the context of this discussion, it is important to highlight that bringing agency back to institutional theory, for example through the concept of institutional work, does not imply the adoption of the rational actor model (Lawrence and Suddaby, 2006). Scott (2008:68) proposes that "all decisions are admixtures of rational"

calculations and non-rational premises". Lawrence and Suddaby (2006: 219) suggest the concept of an actor that is capable of working with logics that are institutionally defined, applying "culturally-defined forms of competence and knowledge" and creativity to adapt.

Another concept that needs to be highlighted as it contributes to the discussion on structure and agency is that of institutional logics. According to Thorton and Ocasio (2008) this term was first introduced by Alford and Friedland (1985), and further developed by the same authors in their (1991) piece. In the latter work, Friedland and Alford (1991: 248) define institutional logics as "a set of material practices and symbolic constructions which constitutes its organising principles and which is available to organisations and individuals to elaborate". The underlining idea is that each core institution in society has a logic that imposes limits to actors' behaviours and forms the basis of individuals, organisations and society as a whole; at the same time, however, institutions also offer sources of agency and ultimately change (Thornton and Ocasio, 2008). Institutional logics have also been defined as "shared understanding of the goals to be pursued and how they are to be pursued" (Battilana et al., 2009: 69) or the institutional template for organising (Battilana et al., 2009). Finally, Thorton et al (2012: 02) define institutional logics as "frames of reference that conditions actors' choice of for sense-making, the vocabulary they use to motivate action, and their sense of self and identity". On the same note, the actors highlight that "the principles, practices, and symbols of each institutional order differentially shape how reasoning takes place and how rationality is perceived and experienced" (Thornton et al., 2012: 02).

Scott (2008) proposes that actors in developed societies have to deal with a multitude of frameworks in various areas (such as for example, economic, political or religious) and each of these are guided by a different logic. Institutional logics may vary in a number of ways, such as: in their content (beliefs and assumptions), in their penetration (more general or more specific details on templates to organise), in the extent of their horizontal links (the extent to which it is compatible to other relevant institutional arrangements) and the extent to which they are contested (Scott, 2008). Given this variety, actors in general and organisations in particular are often confronted with contradictory logics (Scott, 2008).

Thorton and Ocasio (2008) propose five principles that guide the theory around institutional logics. The first one is embedded agency, or the idea that "decisions

and outcomes are a result of the interplay between individual agency and institutional structure", advancing a role for agency, while recognising boundaries to individual behaviour, in a case of partial autonomy (Thornton and Ocasio, 2008: 103). Secondly, it views society as an inter-institutional system, with each sector representing different expectations for individual and organisational behaviour, exposing the potential to contradictions of conflicting logics. Thirdly, an institutional logics perspective assumes that each of society's institutional orders have material and cultural characteristics, i.e. that "institutions develop and change as a result of both of the interplay between both of these forces" (Thornton and Ocasio, 2008: 105). Fourthly, it recognises that institutions are active at multiple levels and highlights the need for studies to be very precise about the level they are focusing on when studying institutional logics. Finally, the fifth principle relates to the need to be aware of historical contingency, in other words, the need to understand whether theoretical approaches are universal or particular to a certain historical time and place (Thornton and Ocasio, 2008).

All the discussions and theoretical concepts in this section highlight the relevance of understanding where a role for agency lies within institutional theory. This is a key issue in institutional theory and one that may help explain a number of behaviours explored in this thesis, such as for example, decoupling. The recognition that actors may have varied responses to institutional pressures will therefore underlie this thesis.

#### 2.1.6.1 Understanding decoupling

When understanding different responses to institutional pressures, the concept of decoupling is one that comes into light. Decoupling involves the disconnection between the commitments made, or the practice or structure the organisation has formally adopted, and the actual practices of this organisation (Hess, 2008, Crilly et al., 2012, Meyer and Rowan, 1977). As proposed by Meyer and Rowan (1977: 357) "decoupling enables organisations to maintain standardised, legitimating, formal structures while their activities vary in response to practical considerations." In other words, these formal structures are disconnected from regular practices, allowing firms to "buffer internal routines from external uncertainties" and enhance flexibility while maintaining legitimacy (Westphal and Zajac, 2001).

While the idea of firms knowingly decoupling commitment and practice, taking advantage of the information asymmetry between the firm and its stakeholders,

has been widely discussed, some authors have also proposed that firms may decouple due to a lack of capacity to implement the actions it has committed to (Lim and Tsutsui, 2012, Crilly et al., 2012). In addition, more recent work on symbolic management discusses not only reasons beyond "bad intentions" for failure to keep promises, but also the fact that decoupling is more nuanced than a "yes-or-no" decision, allowing firms to choose level of compliance in a continuum (Crilly et al., 2012, Kim and Lyon, 2012). In a study on voluntary reporting of greenhouse gas emissions, for example, Kim and Lyon (2012) found that firms would use selective disclosure of performance. Participants generally reported reductions that albeit real, did not show the full picture of an actual increase in total emissions (Kim and Lyon, 2012).

Kim and Lyon (2012: 01) highlight the fact that not all firms resort to the seemingly very profitable strategy of decoupling, suggesting that "symbolic management is useful for some firms under certain circumstances, but not for all firms nor in all circumstances". Firms' attributes and characteristics of its operating environment may create different incentives or disincentives for firms to engage in symbolic management. The behaviour explored in this thesis – performance in voluntary CSR initiatives – is particularly interesting because, given its voluntary nature, there are often no obvious forces to ensure that participants abide to their commitments.

While there are clear benefits for decoupling, costs of this decision are less discussed. Kim and Lyon (2012) propose that firms incur in internal and external costs when decoupling. The former relates to resources used to implement the minimum to be able to claim and communicate compliance (Kim and Lyon, 2012). By definition, they will arguably always be lower than the cost of substantive (full) implementation. External costs, on the other hand, refer to risks associated with increasing scrutiny revealing discrepancy between firm's discourse and action (Kim and Lyon, 2012). This is arguably where most variation may be found, with different institutional arrangements providing incentives and constrains to symbolic or substantive engagement.

The fact that not all firms choose symbolic commitment suggests that these external costs may indeed vary for different firms, depending on the institutional environment within which they operate. One can argue, therefore, that an environment that can increase the external costs of decoupling by increasing risks of firms being caught in their empty promises and being penalised for that,

are likely to lead to a reduction in firms' likelihood of engaging in symbolic commitment / decoupling.

# 2.1.7 Summary

Although the several strands of institutional theory are highly heterogeneous, comprising a number of different approaches, a common thread among different authors and lines of thought is that organisations are under pressure to adopt certain practices and behaviours and demonstrate consistency with their institutional environment (Björkman et al., 2007). Organisations seek to acquire legitimacy by adopting structures and practices that are considered appropriate in their institutional environment (ibid). This process of isomorphism or convergence towards similar patterns, can arguably be associated with any of the three pillars: regulative, if it results from the coercive imposition of a powerful constituent such as the government; normative, if it is associated for example with pressures by professional associations to adopt "appropriate behaviour"; or cognitive/mimetic, in cases where organisations facing uncertainty adopt practices or structures observed amongst organisations considered successful in their milieu. Over time specific regulative, cognitive and normative frames become institutionalised, i.e. become increasingly consistent and coherent making it difficult for organisations to deviate from that expected behaviour (Morgan and Kristensen, 2006).

Another important aspect of institutions is that they operate at different levels, which Scott (2008) proposes to call, for the study of organisations: world system, society, organisational field, organisation population, organisation and organisation subsystem. These levels range from the macro to the micro level. These multilevels of influence will be explored in more details in the next section.

# 2.2 Understanding multilevel institutional influences in corporate behaviour

This second section builds on the first one and recognises the multilevelness of institutions. It provides a discussion on how institutions function at each of these levels. As discussed before, institutions are formed by different elements (regulative, normative, and cognitive) and are borne by different carriers (symbolic systems, relational systems, artefacts and routines). Equally important is the recognition that institutions function at different levels, which Scott (2008) proposes to call, for the study of organisations: world system, society, organisational field, organisation population, organisation and organisation

subsystem. In a Russian doll shape, these levels range from the macro to the micro level.

Not only institutions are active at different levels, but also different levels can influence each other. For one thing, institutional demands at international level can influence the discussion of norms and rules at national level. Cortell and Davis (1996) propose that international rules and norms can influence a country's policy choice through the national political process. The authors hypothesise that domestic actors – from the government to society in general – may evoke international rules and norms to advance their own interests in the national political arena. Through this call, international rules and norms may enter the national policy debate and, depending on circumstances, influence and affect the discussion and the chosen policy outcome (Cortell and Davis, 1996).

This section will elaborate further on how these pressures may play at these different levels. Given the overlaps between organisational field and industry, the discussion on organisational population would arguably find several overlaps and therefore most likely add only marginally if at all for the discussion. As for organisation subsystem, this will not be explored either. Adding further granularity to the organisation level would also arguably not make a significant contribution to the discussion. Where appropriate, these will be reflected in the discussion at the organisational level. However, this chapter does offer considerations at an individual level.

# 2.2.1 Transnational level – the World System matters

World system refers to the transnational space, beyond national boundaries and sovereignty. The global perspective posits that there are some fundamental values that transcend national boundaries and form the building blocks of every society (Arthaud-Day, 2005). Drivers for corporate social performance at the international level arguably mainly rely on the normative pillar to influence corporate behaviour.

If one considers the United Nations System (UN) as a main body of international governance, it is possible to observe a change in the way it sought to influence corporate behaviour in relation to sustainable development and corporate social performance. The UN attitude towards the private sector has suffered a significant change since the creation of this multilateral organisation in 1945 (Therien and Pouliot, 2006). It went from neutrality in the 1940s, to confrontation

in the 1960s, and turned into a tone of cooperation in the 1990s. In early days, in need of maintaining a posture of impartiality towards both market and planned economy nations in the context of the Cold War, the UN adopted a posture of distance from business (Therien and Pouliot, 2006). In the 1960s, with the rise of the North-South conflict and the debut of several developing countries as UN members, the UN's attitude of distance turned into animosity towards business and regulating the private sector became a top development priority for this institution (Therien and Pouliot, 2006). In the 1970s, multinational corporations (MNCs) were perceived as the cause of many underdevelopment problems, and the UN created new institutions such as the United Nations Commission on Transnational Corporations (UNCTC) to regulate MNCs' activities (Therien and Pouliot, 2006).

In the late 1980s, the end of the Cold War and the increasing process of globalisation, combined with the rise of neo-liberalism, generated major changes in the international environment in which the UN operated (Witte and Reinicke, 2005). One significant response from the UN was the beginning of a process of opening to non-state stakeholders, from both civil society and the private sector (Witte and Reinicke, 2005). In this context, the understanding that business could contribute to give "a human face to the global economy" (McIntosh et al., 2004a) and support UN goals started to translate, among other things, a into a tone of cooperation and partnership. It was in this context that the United Nations Global Compact (UNGC) emerged. Arguably, in institutional language, the UN approach to business started to shift from regulatory to mainly normative.

Scholars have studied the development of other normative frameworks at the transnational level, notably in the form of international standards. The Global Reporting Initiative (GRI), which offers a widely used template for corporate social reporting, is an example (Brown et al., 2009a, Brown et al., 2009b). More recently, the development of the ISO 26000, which aims at establishing international (non-binding and non-certifiable) standards for corporate responsibility, also is an example of a normative pressure at the international level.

Finally, several scholars have also recognised the importance of NGOs in ensuring higher corporate social performance, by monitoring corporate actions and advancing normative calls for responsible behaviour. Campbell (2007) posits that firms will tend to display higher CSP where private independent organisations such as NGOs exist and have the capacity to monitor and in some

cases mobilise to change corporate behaviour. This idea can arguably be transposed to the international level, where non-governmental organisations have been active in a watchdog role.

In summary, a globalist view posits that while in the past following national rules and regulations was sufficient, the regulatory vacuum of the transnational space makes it necessary for companies operating at this level to adhere to normative pressures to ensure legitimacy and a social license to operate (Gjolberg, 2009).

## 2.2.2 National institutional frameworks matter

Despite increasing globalisation and subsequent claims of convergence of business structures and practices, there are remarkable differences in the way economic activities are organised and controlled across different countries (Whitley, 1999). The reasons for the emergence of different models to organise national economic systems have been typically assumed to be related to improved features or increased effectiveness of the more recent models (Whitley, 1999). This functionalist view is limited though, in that in assuming that a systemic rationality governs all economic activities independently of the social context, it fails to appreciate the dynamism of economic systems and the influence of institutional arrangements in the organisation of economic relations. It falls short of accounting for the role of other pressures in shaping economic relations and market organisation, notably the historical context and actions of interest groups and collective actors (Whitley, 1999). Prevailing social structures and conventions have a significant impact not only on the development of systems of economic coordination and control, but also on the "rules of the game" based on which organisations and individuals make "rational" economic decisions (Whitley, 1999).

It follows that the nation state still represents a relevant context for understanding corporate strategy, as it provides institutional environments with the ability to influence corporate strategy (Gjolberg, 2009). Firms do not operate in a vacuum. Countries develop different institutions, depending on their history and national choices. These historically grown institutions lead to the development of different national contexts which will form the environment in which companies operate (Whitley, 1999). These national contexts will offer varied incentives and constrains for corporate behaviour, including in regards to corporate social performance. As a result, societies have different social, economic, political and cultural institutional patterns, which will exert different pressures on companies, setting the conditions to either promote or hinder

corporate social performance (Jeurissen, 2004). Jeurissen (2004) argues that half of corporate responsibility is actually located in the society that defines the institutional framework within which the company operates, and that therefore there is no CSP without responsibility being known and valued in the society.

## 2.2.2.1 Understanding variations in the national context

Since the end of the Soviet Union and the consequent collapse of the "contested alternative" political economy scholars have started focusing on the comparison of different types of capitalism (Kang, 2006). The literature on compared capitalism is vast, and is notably concerned with the impact of institutional variables on economic performance, modes of governance and company strategies (Jackson and Deeg, 2006). Three main institutional approaches have been used over the last years to compare and assess variations among different political economic systems.

The first approach – named modernisation (Hall and Soskice, 2001, Jackson and Deeg, 2006) or state-centred (Kang, 2006) - focused largely on processes of policy making and placed the state at the centre, looking into different states' capacity to devise and implement policies to modernise their industries. States' capacity to intervene in their economies was understood to be heavily dependent on the institutional configuration of both state and economy, which was in good part a result of history (Jackson and Deeg, 2006).

The society-centred or neo-corporatism approach also has an interest in explaining policy making; it recognises, though, that a wider range of societal interests are at play and constrain governmental action. The focus moves from the state to the political system. Two main streams can be identified within this approach: pluralist, which took on board the full range of societal interests and their influence in policy making, and the corporatist approach, positing that only some organised interests (for example: trade unions, employers associations) had this influence (Hall and Soskice, 2001).

More recently, the "production (or firm) centred" or "social systems of production" approaches brought the firm to the centre, looking at capitalism as an organisation of economic activity (Kang, 2006, Hall and Soskice, 2001). Several approaches are under this umbrella, notably: social systems of production or French Regulation theory (see: Michel Aglietta, 1998, Michel Boyer, 2000, 2003), theory of flexible specialisation (see: Piore and Sabel, 1984, Hirst and Zeitlin,

1989), business systems approach (see: Whitley, 1999) and varieties of capitalism (see: Hall and Soskice, 2001). I will further explore the last two.

The varieties of capitalism (VoC) approach posits that different national institutional frameworks will provide firms with competitive advantage to engage in specific types of activities (Hall and Soskice, 2001). While institutional arrangements may vary within the same country creating inconsistencies at national level, the theory of varieties of capitalism focuses on the dominant model observed in a specific country (Crouch, 2006). There are two central ideas in the varieties of capitalism approach: (1) system coordination and (2) institutional complementarities (Kang, 2006). The former suggests the occurrence of two different and opposing types of capitalism – Coordinate Market Economy (CME) and Liberal Market Economy (LME) - which vary according to the degree of "coordination" of a political economy. The latter argue that institutions will complement each other and the balancing between these will create an environment conducive to certain behaviour (Kang, 2006).

In a similar vein to the varieties of capitalism approach, the **national business system approach** (NBS) argues that historically grown institutional frameworks will mould different market systems or national business systems (NBS) (Matten and Moon, 2008). These will constitute the environment in which companies operate and offer different constraints and incentives that will shape corporate behaviour. The national business systems approach looks then into the coordination of economic activities and governance issues, explaining national differences in corporate behaviour and market organisations based on variations in culture and in formal institutions (Lundvall, 1999).

The literature on compared capitalism varies in a number of ways such as for example, the number of dimensions required to describe an institutional domain, the number of institutional domains needed to compare countries or define typologies, and even in how many groups or typologies countries should be categorised in (Jackson and Deeg, 2006). These are all relevant questions that involve trade-offs and can have a significant impact on the results of analyses of cross-country variations. Authors have proposed different answers, ranging from the adoption of a binary typology by Hals and Soskice' VoC (Liberal Vs. coordinated economy), to Whitley's NBS' six-ideal-types typology; or from Amable's and Boyer's five institutional domains, to Rhodes', Schmidt's and Ebbinghaus' emphasis on the state/welfare state as a key institutional domain (Jackson and Deeg, 2006).

Some key challenges remain in the comparative capitalism literature, notably in relation to accommodating institutional change. As reviewed in the previous subchapter, although institutions transmit the idea of stability, they can also go through change, either radical or incremental (Scott, 2008). Over the last decade, systems of capitalism have gone through significant change, resulting on increasing questioning of the typologies proposed by different scholars in the 1990s (Jackson and Deeg, 2006). In addition, evidence suggests that some countries have gone through enough change to put into question the "type of capitalism" they had been categorised in the 1980s or 1990s (Jackson and Deeg, 2006).

Another limitation refers to the role of agency. Conforming is not the only possible response that companies may have to institutional demands (Oliver, 1991). Firms may choose strategies that do not necessarily "fit" their environment expectations, i.e. firms active in the same environment may respond differently to its institutional framework depending on their dynamic preferences (Jackson and Deeg, 2006). To these limitations, one could add the fact that the whole comparative capitalism literature focuses mainly on Western Europe and North America (Jackson and Deeg, 2006) (although some studies have applied it to different sets of countries).

In summary, it is proposed that economic relations and activities are socially constituted and institutionally variable, and as a result the organisation and outcomes of competitive processes as well as the nature of the participating actors will vary significantly across different social contexts (Whitley, 1999), notably across different countries. The logics guiding economic decisions and activities are highly influenced by the institutional arrangements of the operating context, and therefore are proposed to vary across contexts with different institutional frameworks, i.e. to vary across different countries. Variations in institutional frameworks will create comparative institutional advantage to the adoption of specific behaviours, as different institutional settings may present diverse incentives and constraints to certain activities. In responding to these different incentives and constraints, firms active in different countries, seeking to ensure legitimacy, will choose strategies and activities that "fit" their institutional environment, resulting in variations in their patterns of behaviour (Jackson and Deeg, 2006). In simple terms, national context matters in understanding and seeking to predict corporate behaviour.

## 2.2.2.2 Regulatory mechanisms

From a neoinstitutionalist perspective, organisational practices change and become institutionalised because they are seen as legitimate (Matten and Moon, 2008). Institutional frameworks will legitimise actions through processes involving coercive, mimetic and normative pressures. As for the first one, the argument is that practices will be legitimised by rules, norms or laws (Matten and Moon, 2008). For example, since 2009, large companies in Denmark are required to provide information on their work on corporate responsibility in their annual reports, or at a minimum state their position in regards to this issue<sup>4</sup>. As the first year of the new law comes to an end, the Danish Government reports that 97% of the companies subject to the legislation comply with it (Danish Commerce and Companies Agency 2010). Within this universe, 43% report on corporate responsibility in the context of the annual report for the first time (although several have previously reported on this elsewhere) (Danish Commerce and Companies Agency 2010).

It is proposed that the level and content of state regulation, as well as the level of state intervention, can influence firms' CSP. The way this may happen has been subjected to different interpretations. By means of simplification, this can be presented as those who believe CSP and regulation are complementary and those who believe one substitutes the other. Detomasi (2008) argues that countries where higher levels of regulation and state intervention are more likely to happen, firms will have greater incentives to engage in CSR. The rationale is that firms will voluntarily and proactively engage in self-regulation to maintain discretion over the management of certain issues, and they will tend to do it more often where the perceived risk of regulation is higher. Reid and Toffel (2009), in a study of the conditions under which firms will engage in addressing climate change challenges, found a positive correlation between firms' perception of regulatory threat and their engagement in voluntary practices in this issue. In parallel, it has also been proposed that firms will be more likely to display socially responsible behaviour if there are stronger levels of state regulation in place, combined with proper enforcement of these (Campbell, 2007). Conversely, it has been argued that lower levels of regulation may lead to poorer CSP. King and Lenox (2000), in a study of the efficacy of self and government regulations in the chemical industry, found that the absence of regulation created room for opportunistic action on the part of the companies.

<sup>&</sup>lt;sup>4</sup> For more information on this legislation, please refer to: http://www.csrgov.dk/sw51190.asp

#### 2.2.2.3 Normative mechanisms

Normative pressures are associated with the logic of appropriateness, and their legitimacy rests on moral dictates (Scott, 2008). Normative pressures are then associated with expectations. "Whereas in the past it sufficed for companies to follow national rules and regulations, the present regulatory vacuum forces them to go beyond legal requirements to be perceived as responsible and legitimate actors." (Gjolberg, 2009: 608). Translated into the national context these expectations can be arguably associated with societal normative calls for certain behaviour. More specifically, one can point to normative calls for companies to adhere to more responsible operating standards, i.e. higher corporate social performance. More collective social voices at a national level are often associated with pressures from organised civil society (including NGOs, community organisation, social movements), media attention, general expectations from society and business coalitions focusing on corporate social performance (Moon, 2007). Organisations will respond to these calls in different ways, seeking to acquire or maintain legitimacy.

While normative pressures have an important role in constraining corporate behaviour, for example, by monitoring corporate activities, they also arguably have a role in enabling more responsible corporate behaviour. It has been argued that the institutionalisation of normative calls for CSP, for example, through embeddedness of the CSP concept into business schools curricula, business publications and other educational environments attended by business managers, can increase the likelihood that companies will engage in more responsible behaviour (Campbell, 2007). For one thing, the United Nations' initiative Principles for Responsible Management Education (PRME) has been founded "to inspire and champion responsible management education, research and thought leadership globally" and currently counts with 325 participating organisations worldwide<sup>5</sup>.

The inclusion of CSP in these outlets may lend greater legitimacy to this issue and enable corporate engagement in CSP. Moreover, the same can arguably be said about the role of NGOs or other stakeholders — including scholars in countless efforts to prove the CSP-CFP link - in helping building CSP legitimacy. In any case, one could argue that the more CSP is seen as a legitimate business role, the more institutionalised it is in society (observed, for example, in the number of CSP-related accredited and certified companies), the more

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<sup>&</sup>lt;sup>5</sup> http://www.unprme.org/index.php

companies will be enabled to engage in activities leading to higher corporate social performance.

#### 2.2.2.4 Cognitive/Mimetic Mechanisms

The focus here is on the cultural-cognitive drivers that help shape a shared frame of reference on corporate social performance in a specific geographic area, here chosen to be a country. Frames of reference are "a source of templates or models characteristic of a set of actors that facilitate the adoption of similar practices by other members of the group" (Marquis et al., 2007). The influence of geographic communities on corporate behaviour has been explored in the literature. Marquis et al (2007) compare practices of corporate philanthropy in the metropolitan areas of Minneapolis-St. Paul and Atlanta. The authors found the nature of corporate social action to vary deeply between these two regions, due to businesses alignment to community ideologies and understanding (ibid).

# 2.2.3 Organisational field matters

Organisational field is a fundamental concept in understanding neoinstitutional theory. DiMaggio and Powell's definition is very influential, and building on the concept of industry states that organisational field consists of "those organisations that, in the aggregate, constitute a recognised area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organisations that produce similar services or products" (DiMaggio and Powell, 1983: 148).

Key components of organisational fields are: relational systems, cultural-cognitive systems, organisational archetypes and repertoires of collective action (Scott, 2008). Relational systems refer to the linking of organisations to larger networks. Organisations can be related to each other through direct or indirect connection ("connectedness") or by similar organisational structures ("structural equivalence"). Power relations are also an important component of relational systems, as well as governance systems, the latter defined as arrangements which allow one set of actors to control the actions of another (Scott, 2008). Cultural-cognitive systems allow actors to identify, interpret and understand their participation in a common enterprise. Organisational archetypes are also important in that they shed light into models for individual actors (roles) and collective actors (organisations) in organisational fields. Archetypes provide relevant templates around which functions and systems can be organised, allowing for the engagement in social and economic action. Finally, repertoires

of collective action concern the collection of types of responses or behaviours, which are deemed as acceptable within a specific field. These institutional forms, by providing organising templates, at the same time constrain actors from selecting alternative modes, and legitimise actors enacting acceptable behaviour (Scott, 2008).

According to neoinstitutional theory, it is argued that firms will seek to deal with uncertainty and increasing complexity by imitating actions and behaviours recognised as best practice within their organisational field (Matten and Moon, 2008). These mimetic processes represent a source of isomorphic pressures and may change over time. Organisational fields in early stages of their life cycle have great diversity of approaches and forms. Nevertheless, once established, a strong trend towards homogenisation is observed (DiMaggio and Powell, 1983). Beliveau et al (1994) argue that firms and their managers are part of a web of relationships and will engage in activities and behaviours that serve the firm in the context of these social relationships. Behaviours repeated within the network, gradually acquire legitimacy and can eventually become required behaviours. Firms operating in the same network (which could be, for example, the same industry) will tend to seek legitimacy (Beliveau et al., 1994) and reduce risk (Matten and Moon, 2008) through the enacting of similar behaviour, indicating mimetic processes.

Industry effects that can affect corporate social performance are believed to stem from a number of factors. Jones (1999) defines these as the sector to which the firm belongs to, the industry's public visibility and the degree of government and public scrutiny the industry operates under, its competitive structure and the historically developed industry culture. It is also argued that companies operating in different industries will need different legitimising values and normative frameworks to achieve legitimisation (Scott, 2008). Beliveau et al (1994) found that there is a positive relationship between a firm's CSP and that or their immediate competitors, and propose that industry patterns are a strong predictor of firms' level of CSP. Other studies support this idea. Amato and Amato (2007), in a study of large US firms from different industries covering manufacturing, retailing and credit intermediation, found strong industry effects in explaining variations in charitable donations. The authors argue that industry level differences in philanthropic culture guide individual firm behaviour within specific industries in regards to that practice; firms would need to meet or exceed peers' levels of charitable donations in order to maintain legitimacy.

In summary, the central argument at this level is that firms and their managers will take into consideration peer's behaviour and community-accepted standards - legitimised practices - when deciding on their own strategies and actions in terms of CSP. This may result in mimetic processes through which firms will seek to mimic peers seen as more successful or legitimate in their field, creating increasing homogeneity.

#### 2.2.4 Firm level factors matter

Firms are an integral part of society and therefore depend on it for existence and survival (Sethi, 1975). As a result, firms constantly strive to organise its activities in views of being aligned with society's expectations, seeking to ensure legitimacy and continuity (Sethi, 1975). Firms also seek to align structure and behaviour to accepted standards in society in order to reduce risk in an uncertain environment (Matten and Moon, 2008). More specifically, it can be argued that firms respond to regulatory pressures to avoid sanctions from more powerful actors, they respond to normative pressures to conform to the expectations of relevant actors in the company's organisational field and they respond to cognitive pressures to reduce uncertainty through the mimicking of practices that are recognised as successful (Özen and Küskü, 2009). Ultimately, firms are arguably seeking legitimisation at all these levels.

Studies have found a number of firm level characteristics to be important factors in confounding the relationship between institutional demands and corporate social performance. Firm size, for example, was found to be significantly related to higher corporate social performance in a number of studies (Chen et al., 2008a, Brammer and Millington, 2008, Reverte, 2009, Stanwick and Stanwick, 1998). Explanations behind the effect of size have been linked to all of the three pillars. DiMaggio and Powell (1983) have theorised that organisations that are larger in size are likely to be subject to greater pressure for mimetic isomorphism. The authors propose that the larger the personnel or customer base of an organisation, the greater the pressure on it to demonstrate that it is offering programs and services similarly to those provided by other organisations; i.e. a larger size may encourage mimetic isomorphism (DiMaggio and Powell, 1983).

Authors have also proposed that larger firms are more likely to be subject to regulatory pressures, in the form for example of higher inspection frequency by regulatory authorities (Johnstone and Labonne, 2009). As a result of that, larger firms will have greater incentives to signal good behaviour to regulators. Finally,

normative pressures from NGOs and other social actors for higher CSP are also likely to be more often directed at larger firms. Baker (2010) discusses the fact that big international firms are more likely to receive strong criticism under crisis than small companies. Following this reasoning, it is expected that larger firms, which are more likely to have their legitimacy put at risk, also have the highest incentive to proactively signal good performance to stakeholders.

Despite the variations in focus, the argument is ultimately similar throughout: the larger the organisation, the more visible are its actions and therefore more attention and more scrutiny it is likely to receive from stakeholders (Johnstone and Labonne, 2009, Knudsen, 2011, Schembera, 2012). As result of that, larger firms are likely to be under greater pressure to conform to society's expectations and demands, and therefore more likely to respond to such pressures in order to enhance its legitimacy (DiMaggio and Powell, 1983).

Firms' financial performance has also been extensively covered in the literature. Several studies also found different metrics of financial performance to have a positive and significant relation to CSP (Brammer and Millington, 2004, Brammer and Millington, 2008, Greening and Gray, 1994, Chen et al., 2008a).

Moreover, firm age has been hypothesised as another important factor. This can be arguably explained by the concept of imprinting. Imprinting refers to the impact that the institutional context can have on organisations when they are founded. As highlighted by Scott (2008), imprinting processes are relevant as they tend to become institutionalised and endure as time passes. In a empirical study of 123 rehabilitation organisations established in New York, New Jersey and Pennsylvania before, during and after the World War II, Kimberly (1975) found that while these started mainly as commercial enterprises (i.e. a high proportion of their income was derived from production activities), in the latter years beliefs and norms supporting these centres started to shift emphasis towards the aim of rehabilitation of clients. The study found that 64% of the centres founded after 1946 were rehabilitation-oriented, compared to 18% in the previous period (Kimberly, 1975). In this regard one can argue that the firm age, as a proxy for the time when the company is founded, is an important factor to understand organisational behaviour (Scott, 2008). Extrapolating from that, younger firms, founded in a time when social and environmental responsibilities of businesses were more extensively discussed, would arguably have higher levels of corporate social performance.

Other factors that have been theorised or found to confound this relationship are, for example, characteristics of firm governance (such as board structure, board diversity), firm ownership structure, type of product, firm visibility, level of innovation, level of internationalisation, among others.

## 2.2.5 Individual level

All individuals are introduced into a pre-existing social structure which, in static terms, will determine who one is, depending on when and where one happens to be (Jones, 1999). However, over time, actions of individuals feed back into the structure and change it (Jones, 1999). In light of this, it has been theorised that individual characteristics, notably of those who are in leadership position in the firms, can have an impact in firms' choice of response to institutional demands. Institutional demands at this level are arguably mainly associated with normative and cultural-cognitive elements. Waldman et al (2006) argue that given that managers are largely responsible for the implementation of corporate responsibility measures, it is important to understand if corporate responsibility values guide their decisions.

Values are an important mechanism to shape action (Waldman et al., 2006). For one thing, studies have found top management awareness and commitment to sustainability-related issues to have a significant positive relationship with corporate social performance (Greening and Gray, 1994, Muller and Kolk, 2010, Weaver et al., 1999). One could argue that the more ingrained these values are in an individual behaviour outside of the firm environment, they will find it more naturally and taken for granted to also bring them to the company environment, responding positively to pressures for higher corporate social performance.

Different factors were pointed as having an effect on individual perception and understanding of issues related to corporate social performance. For one thing, studies have theorised that decision makers' age can influence CSP. The rationale is that individuals at a more advanced age have a broader perspective of issues and entities that are involved in the decision-making and include different constituent groups (Waldman et al., 2006). Individual's level of education was also expected to affect CSP for similar reasons (i.e. higher levels of education expected to be associated with broader view of decision making aspects) (Waldman et al., 2006).

# 2.3 Summary and next chapters

In summary, institutions operate at different levels, which Scott (2008) proposes to call, for the study of organisations: world system, society, organisational field, organisation population, organisation and organisation subsystem. These levels range from the macro to the micro level. Institutions at all levels are proposed to influence corporate behaviour in general, and corporate social performance in particular.

While specific propositions and hypothesis will be elaborated in each empirical chapter, it is important to offer a brief overview of what each chapter will address from a theoretical perspective. Chapter four will focus on drivers for firms' sign up to the UNGC. Organised around the regulative/coercive, normative and cognitive/mimetic mechanisms, it will explore how these mechanisms influence firms' decision to make a voluntary commitment to the UNGC. This chapter will also take into consideration the role of previous CSP and level of economic development at firms' home country as moderators of firms' decision to join.

Chapter five builds on chapter four, and goes into greater detail on the decision to join, focusing on speed of adoption. This chapter appreciates that coercive, normative and mimetic mechanisms may exert different pressures in each phase of the institutionalisation of an initiative. For one thing, mimetic pressures are proposed to offer a stronger pressure for firms to join in later stages. As the institutionalisation of a practice progresses, the decision to adopt it becomes more of a requirement than a choice, as normative and cultural pressures reach a point where non-adopters risk to be seen as deviants from the norm (Scott, 2008). In other words, adopting the new practice becomes important in views of ensuring legitimacy (Scott, 2008). Conversely, coercive pressures are proposed to have greater impact on the early stages of institutionalisation of the initiative, when uncertainty in regards to the benefits of participation is greater (Delmas and Montes-Sancho, 2011).

Chapter six goes beyond the decision to join, seeking to understand drivers for firms' performance in the UNGC. It explores under which conditions promises made by firms when they join are more likely to be delivered upon. While recognising that firms will aim to conform (DiMaggio and Powell, 1983) to dominant practices within their operating environment in order to obtain legitimacy and ultimately ensure its survival in the long run (Scott, 2008), it recognises that conforming is not the only available choice for organisations (Oliver, 1991). In this context, it is proposed that while firms' choice of

substantive or ceremonial engagement after joining an initiative lies within the organisation itself, a number of institutional pressures may influence and moderate this decision. For one thing, the operating environment may offer different incentives and threats for certain behaviour. These variations will arguably influence the external cost of decoupling, i.e. the risks associated with increasing scrutiny revealing discrepancy between firm's discourse and action (Kim and Lyon, 2012). This is likely to lead to conditions that are more or less conducive for decoupling – the higher the external cost, the less interesting it may be for firms to engage in ceremonial behaviour, and vice versa. This chapter will explore, from an institutional perspective, the factors that have been proposed to influence firms' decision to make a substantive or ceremonial commitment at national, industry and firm levels.

Finally, chapter seven builds on chapter six, and focuses on the relationship between sign up and firms' corporate social performance. It explores the extent to which firms' motivation to join and characteristics of the initiative may impact firm performance in the UNGC. For one thing, following neo-intuitional theory, it proposes that early adopters, do so in views of achieving improved performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008), and therefore are more likely to display higher performance improvements on the standards or principles they adopted (Naveh et al., 2004, Yin and Schmeidler, 2009, Delmas and Montes-Sancho, 2010). Conversely, late adopters are proposed to be more guided by the aim of ensuring legitimacy (Scott, 2008, DiMaggio and Powell, 1983), and therefore are more likely to display a tendency to decoupling. This chapter also explores characteristics of the initiative that may be more or less effective in leading firms to display substantive commitment.

However, before the empirical chapters, chapter two will offer a review of the state of the art of the literature on CSP, and voluntary CSR initiatives. The next chapter starts with a brief outline of corporate social performance and voluntary regulatory initiatives. The second section covers the literature on the motivations for joining such voluntary initiatives. Following this, the third section reviews the literature on the impacts of voluntary CSR initiatives on firm behaviour. Finally, the fourth section presents the research agenda that guides this thesis.

# 3 Chapter 2: Literature Review

# 3.1 Introduction

The nature and extent of business' responsibilities to society have long been debated in academic, policy, and practitioner fields (Blasco and Zolner, 2010, Jenkins, 2005). As businesses have become larger and more multinational, approaches to understanding and ensuring business accountability to society have necessarily become more complex and challenging (Lodge and Wilson, 2006, Utting, 2002). In addition, the globalised world has seen increasing involvement of private actors – corporations included – in the development and implementation of rules in policy areas that have once been primarily under government's responsibility, suggesting a shift in global business regulation from state-centric towards new multilateral and non-territorial forms of regulation, with the participation of private and non-governmental actors (Scherer et al., 2006).

This thesis explores the role of voluntary forms of regulation, specifically the UNGC, in influencing firms' corporate social performance. Despite their economic success and apparent power, companies have been often accused of several social and environmental problems, including environmental pollution, labour rights abuse, erosion of democracy, corruption, and others (Waddock, 2008), underlining their vulnerability to lapses in regards to social and environmental issues. While globalisation may have increased corporate access to markets and lower production costs, and allowed multinational firms to impose trade conditions on less powerful actors, globalisation has also contributed to increased levels of scrutiny over business activities (Knox and Maklan, 2004) creating limits to their power. Given the absence of a global governance structure able to ensure that businesses are accountable and socially and environmentally responsible, "a largely voluntary corporate responsibility infrastructure has emerged that is reshaping companies' responses to these issues and fostering wholly new practices and behaviours (Waddock, 2008: 87)". These new institutions foster a multi-bottom-line approach, supporting the inclusion of social, environmental and stakeholder concerns into the business model (Waddock, 2008). In the long run, it is expected that these "new rules of the game" reframe the conditions for companies to ensure their legitimacy and acceptance as social actors (Waddock, 2008).

This chapter, provides a critical evaluation of research that seeks to understand the role and impacts of voluntary forms of corporate regulation in relation to firms' social and environmental performance. Such voluntary forms of regulation are increasingly popular, but evidence on firms' motivations for participating in them, and their impacts on socially desirable outcomes are unclear. The review is structured into the following sections. The first section briefly outlines the key concepts of the thesis – corporate social performance and voluntary regulatory initiatives. The second section then explores the motivations for joining such voluntary initiatives, distinguishing between firms' motivations and contextual elements driving sign up and between early and late joining. The third section examines research that evaluates the impacts of voluntary regulatory forms on firm behaviour and outcomes. Finally, the fourth section reflects on the previous discussions to develop a research agenda that identifies key gaps in existing knowledge.

# 3.2 Corporate Social Performance and Voluntary CSR Initiatives

This section situates the subsequent analysis by defining and delineating the key concepts addressed in this thesis.

# 3.2.1 Corporate Social Performance (CSP)

A plethora of concepts are used to define the relationship between business and society: corporate social responsibility, corporate citizenship, corporate responsibility, and corporate social performance, among others. Sethi (1975:58) already expressed concern over this lack of clarity over 30 years ago, saying that "corporate social responsibility has been used in so many ways that it has lost all meaning" and "devoid of an internal structure and content, it has come to mean all things to all people". Sethi (1975) worried that this could allow different social actors to manipulate the concept and its operationalisation according to their own interests and agendas.

Although there is not a universal definition of CSP, the majority of the definitions seem to involve a concept whereby companies seek to voluntarily understand and integrate social and environmental concerns into its operations, and in their relation with their stakeholders (Reverte, 2009). In order to choose a definition, a methodology informed by that used by Dahlsrud (2008) was applied. As a first step, definitions of CSP were collected through a literature review. Following this, CSP definitions were analysed and four key themes that underlie this concept were identified, namely:

Table 2: Key themes of CSP

Key themes identified	Key themes identified Explanation	
COMBINATION OF PRINCIPLES + PROCESSES + POLICIES	CSP combines principles of social responsibility, processes that will guide the approach to enact corporate responsibility and policies that will provide the method to operationalise corporate response to social issues.	(See for example: Wood, 1991b, Wood and Jones, 1995, Wartick and Cochran, 1985)
COMPREHENSIVENESS	CSP is comprehensive, it is an aggregation of different actions, it is multi stakeholder and multi issue.	(Carroll, 2000, Luo and Bhattacharya, 2009, Muller and Kolk, 2010, Waddock and Graves, 1997)
CONCERN WITH STAKEHOLDERS	The company's relationship with its stakeholders is very important and should be considered.	(Wood, 1991b, Wood and Jones, 1995, Carroll, 2000, Husted, 2000)
FOCUS ON OUTCOME	There is a major concern with the outcome of the principles/policies/processes; Concerns are expressed in relation to the company's social impact.	(See for example: Wood, 1991b, Wood and Jones, 1995, Clarkson, 1995, Schuler and Cording, 2006, Waddock and Graves, 1997)

A new review of the definitions indicated that the one that more broadly covers all these issues is that proposed by Wood, in her paper Corporate Social Performance Revisited: (Wood, 1991a: 692): "a business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships." A verification of number of citations (as noted by Google Scholar) reiterated the relevance of the article, which had as of July 21<sup>st</sup> 2014, 3359 citations<sup>6</sup>.

Although Wood's definition may seem to be too broad, it needs to be so if CSP is to be applicable globally and across different industries. Keeping the definition broad and setting the study limitations on the scope of what will be reviewed seems the most appropriate option. In addition, this definition serves the purpose of this study, i.e. it offers an interesting framework to advance the understanding of what drives corporate engagement in CSP and how this engagement varies depending on the context in which the company exists and operates. This definition arguably covers why company engage (principles), how

<sup>6</sup> Having established that, it is important to highlight that articles that use "sister" concepts have also been used in this research. Precisely because of the challenges just mentioned, a review that did not consider these other definitions would arguably not offer a clear picture of the state of the art of the CSP literature.

they engage (processes) and how this engagement is translated into practice (outcomes).

#### 3.2.1.1.1 CSP Dimensions

As with definitions, the literature does not offer a clear description of which issues constitute the dimensions of CSP (van Beurden and Gossling, 2008). Blowfield (2005) makes a distinction between "negotiable" and "non-negotiable" values to advance the argument that corporate responsibility has promoted change solely in areas where business were willing to negotiate over. Although this argument can be to some extent extreme, in that it does not seem to fully acknowledge the potential of some social actors to influence corporate behaviour, it contributes to build understanding on the power struggles involved in defining these areas of responsibility.

Porter and Kramer (2006) argue that no one business can solve all society's problems, and therefore, firms should choose social issues in which to engage based on whether it presents an opportunity to share value (i.e. create benefits for both business and society), rather than looking at how worthy a cause is. The authors suggest that social issues affecting society falls into three main categories: generic social issues, which although may be relevant to society, do not particularly affect or are affected by the firm's activities; value chain social impacts, i.e. social issues that are significantly affected by a firm's activities (an inside-out view); and social dimensions of competitive context, i.e. social issues that can significantly affect the firm's operations (an outside-in view). Porter and Kramer (2006) say that firms should understand and rank its social issues, and concentrate on the ones that have a direct link to its operations. Jenkins (2005) adds a geographical concern, arguing that the fact that corporate responsibility today has been largely driven by players from Northern countries has an important impact on the choice of issues that will have a more prominent role.

Authors' choice of issues and/or stakeholders to be studied seems often to be made on the basis of convenience, most often depending on the issues covered by the dataset used. Along with data availability, another explanation for this could be the fact that issues may change across different industries (Carroll, 1979), place of operation, company size, among other factors. Carroll (1979: 501) says "it is partly for this reason that the "issues" approach to examining business and society relationships gave way to managerial approaches that are more concerned with developing or specifying generalized modes of response to all social issues that become significant to a firm". A study by Peloza (2009)

illustrates this challenge, pointing out that a review of 159 studies on the business case for CSP indicated a number of different metrics to measure CSP. The author (Peloza, 2009) adds that the most used metric was applied in only 18% of the studies, suggesting significant inconsistency in previous research.

Despite this diversity, there seems to be some convergence in the choice of themes. The summary below suggests that some issues and stakeholders were more prominent in this review, namely employees/minority relations/diversity, community, corporate giving, ethics and the environment.

Table 3: Key dimensions of CSP

Issue/Stakeholder	Selected Articles	
Labour/ Employees / Minority	(Cox et al., 2004, Brammer et al., 2006, David et al., 2007,	
relations / Diversity	Dentchev, 2004, Carroll, 2000, Albinger and Freeman, 2000,	
	Wood and Jones, 1995, Coffey and Fryxell, 1991, Kuntz et	
	al., 1980, Lerner and Fryxell, 1988, Van Buren, 2005)	
Community	(Cox et al., 2004, Brammer et al., 2006, David et al., 2007,	
	Wood and Jones, 1995, Cohn, 1970)	
Corporate Giving	(Albinger and Freeman, 2000, Brammer and Millington, 2004,	
	Brammer and Millington, 2008, Carroll, 2000, Coffey and	
	Fryxell, 1991, Cohn, 1970, Gao, 2009, Lerner and Fryxell,	
	1988, Levy and Shatto, 1978, Luo and Bhattacharya, 2009)	
Environment	(Cox et al., 2004, Brammer et al., 2006, David et al., 2007,	
	Dentchev, 2004, Carroll, 2000, Albinger and Freeman, 2000,	
	Wood and Jones, 1995)	
Ethics / Values	(Sims, 2009, Weaver et al., 1999, Alas, 2006, Blodgett et al.,	
	2001, Spicer et al., 2004, Wood and Jones, 1995, Slater and	
	Dixon-Fowler, 2009, Beekun et al., 2003, Martin et al., 2007)	
Transparency / Disclosure	(Wood and Jones, 1995, Reverte, 2009, Reid and Toffel,	
	2009)	
Customer / Consumer / Product	(David et al., 2007, Wood and Jones, 1995)	
quality and safety		
Governance	(Wood and Jones, 1995)	
Legal / Regulatory aspects	(Gao, 2009, Wood and Jones, 1995)	
Economic aspects	(Gao, 2009)	

This is aligned with previous findings in the literature. In a study covering 25 countries where respondents had to indicate areas where companies should be hold accountable for, the domains of labour, human rights and the environment emerged most prominently than other areas (Environics, 2000 cited by Arthaud-Day, 2005). Muller and Kolk (2010: 10) add that the "three domains that emerge from the literature as the most commonly measured dimensions of CSP are environmental performance, community relations, and labour relations". It is interesting to remark that labour, human rights, philanthropy and the environment are also topics proposed in the framework of major practitioner initiatives, such as the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI).

This thesis will focus on the four issue areas proposed by the UNGC, namely: human rights, labour, the environment and anti-corruption. This is not only necessary – to fulfil the aim of exploring corporate behaviour in this initiative – but also aligned with prominent issues in the literature on CSP, as discussed above.

# 3.2.2 Voluntary CSR initiatives

In the realm of CSP, voluntary CSR initiatives are an important phenomenon. The past couple of decades have seen an important rise in the number of such initiatives, and on firms' interest in joining them (Perkins and Neumayer, 2010, Perez-Batres et al., 2012a). CSR voluntary initiatives codify a group of rules, roles and expectations that are of public interest, such as for example, care for the environment, human rights, labour rights, among others (Perkins and Neumayer, 2010). Such initiatives aim at governing firm behaviour in these areas (Perkins and Neumayer, 2010) and hold firms accountable for their actions creating transparency (Rasche, 2009b).

By joining such initiatives, firms are signalling to their stakeholders their commitment and alignment with certain standards, addressing public concerns (Perkins and Neumayer, 2010). Adoption of such standards or guidelines may help firms respond to public concerns, reduce the information asymmetry between the firm and its stakeholders (Perez-Batres et al., 2012a), ultimately increasing its legitimacy. At the same time, it may help firms improve internal efficiency and/or that of their supply chains, for example by providing the basis for monitoring and verification of suppliers' CSR standards (Perkins and Neumayer, 2010).

## 3.2.2.1 From values to standards: different formats of voluntary CSR initiatives

Leipziger (2010) proposes that voluntary CSR initiatives can be placed in a continuum from values, to principles, to codes of conduct, to norms and finally to standards. She provides useful definitions that help clarify what each type of voluntary CSR initiative entails:

Table 4: Definitions of voluntary CSR initiatives (Leipziger, 2010: 38)

Туре	Definition
Value	"Any object or quality desirable as a means or as an end in itself [American College Dictionary 1970]"
Principle	"Fundamental truth or law as the basis of reasoning or action; a personal code of conduct [Concise Oxford Dictionary 1995]"
Code of conduct	"A set of rules [Concise Oxford Dictionary 1995]" or a "formal statement of the values and business practices of a corporation. A code may be a short

	mission statement, or it may be a sophisticated document that requires compliance with articulated standards and have a complicated enforcement mechanism [www.codesofconduct.org]"	
Norm	"Model or pattern [American College Dictionary 1970]; norms tend to be internationally agreed"	
Standard	"An authoritative model or measure, a pattern for guidance, by comparison with which the quality, excellence, correctness, etc. of other things () may be determined [American College Dictionary 1970]; or a set of principles, code of conduct or process system established by a third party whereby adoption of tat standard leads to a prescribed level of performance being achieved [Smith 2002:21]".	

Codes of conduct are generally specific to a firm or to an industry (Leipziger, 2010). When drawn by companies, they can vary significantly across firms in terms of how specific their requirements are or how they monitor compliance (Preuss, 2010). A relevant example of a firm-level code is Shell's Business Principle. The document defines the firm's position in relation to a number of issues, including integrity, health and safety, environment, community relations, competition among others (Leipziger, 2010). Codes of conduct, however, may also be developed at the industry level, often by industry associations aiming to providing guidance to its members on material issues (Preuss, 2010). Standards, on the other hand, are generally developed through consensus with multiple stakeholders, and by definition should generate a uniform output across adopting firms (Leipziger, 2010). Examples of standards are the ISO certifications, such as the ISO14001. Different formats of voluntary CSR initiatives have therefore different values and uses for firms, and often what can be observed is that firms may engage in a range of initiatives, from a firm code of conduct to a global standard (Preuss, 2010).

## 3.2.2.2 Voluntary CSR initiatives: variations in the nature of a diverse universe

Voluntary CSR initiatives may vary not only in the format, as discussed above, but also in several other ways. First, they vary according to their scope – i.e. they may concentrate on economic, social or environmental performance, or a combination of these three issue areas (Rasche, 2009b), covering one or a number of different issues (Leipziger, 2010). For example, while ISO14001 focuses on environmental management, the UNGC also includes firms' commitments in the social arena. The table below offers some examples:

Table 5: Voluntary CSR initiatives: different scopes and examples (built from Leipziger, 2010)

Issue	Example of voluntary CSR initiative that addresses said issue
Corporate governance	OECD Principles of Corporate Governance
Anti-corruption	OECD Convention on Countering Bribery
	Business Principles for Countering Bribery
	UNGC
Environment	Ceres Principles
	The Natural Step
	UNGC
	ISO14001
Labour	ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy
	Social Accountability 8000
	UNGC
Human rights	UNGC
Health	ILO Code of Practice on HIV/AIDS and the World of Work

They may also be differentiated based on the mechanisms they support, namely policy – if they bring principles that work as an initial step for dialogue (Rasche, 2009b), such as the UNGC for example; accounting and auditing – if they are more narrowly defined and based on the measurement of predefined data, often with independent verification (Rasche, 2009b), such as the ISO14000, for example; or still reporting – if they offer a framework for the disclosure of social, environmental and economic information (Rasche, 2009b), such as the Global Reporting Initiative (GRI), for example.

They may also be distinguished by the stakeholders at the heart of the initiative (for example, workers, suppliers, customers, among others) (Leipziger, 2003, Leipziger, 2010). For one thing, SA8000 focuses on employees, while the Base Code of the Ethical Trade Initiative focuses on suppliers (Leipziger, 2010). These initiatives also vary in regards to their focus, i.e. focus on process (method) and/or performance (outcomes). While the former defines the procedures that should be followed by the firm (for example, how firms should report on its social management), the latter helps define what are the minimum accepted standards for responsible corporate behaviour (for example, firms should not use child labour) (Leipziger, 2010).

Finally initiatives may also be distinguished by the way they were developed, i.e. uni-, bi- or multilaterally (Leipziger, 2003). While unilateral codes are the ones developed by a specific firm (for example, the Shell Business Principles), bilateral codes are the ones agreed between two parties (for example, the IKEA Framework Agreement), and multilateral or multi-stakeholder codes are the ones whose development involves negotiations across a network of organisations (for example, the ISO26000 has been developed multilaterally, with the involvement of representatives from governments, industry, NGOs, labour organisations among others) (Leipziger, 2010).

One should not forget to highlight that voluntary CSR initiatives may also be industry-specific or region-specific. Firms in different industries are faced with similar sustainability issues and as a result may develop initiatives tailored to address them (Leipziger, 2010). An example of this is the Voluntary Principles on Security and Human Rights, which was developed by the extractive sector in cooperation with multiple stakeholders (ibid). Equally, firms active in the same geographical region may also face similar challenges and seek specific initiatives to address them. An example of the latter is the Asia-Pacific Economic Co-operation Code of Business Conduct (Leipziger, 2010).

This diversity of focuses and elements illustrates the existence of a plethora of standards, norms, guidelines, codes and the likes in the field of CSR, with different objectives, levels of stringency, focus and applicability. Arguably the most prominent in this group are the so-called global standards, which have been named as such for they are designed to be implemented anywhere in the world (Perkins and Neumayer, 2010). In the context of a globalised world, global initiatives tend to be particularly useful for firms given their universality (Leipziger, 2010).

There are several examples of voluntary CSR initiatives at the global level. The OECD Guidelines for Multinational Enterprises are a relevant example, being one of the most comprehensive voluntary CSR initiatives given the wide range of issues it addresses (Leipziger, 2010). The Guidelines cover issues such as labour and industrial relations, human rights, environment, transparency, anticorruption, consumer interest, as well as topics that are not always much the focus of CSP initiatives such as technology, competition and taxation (OECD, 2015, Leipziger, 2010). The Global Reporting Initiative is also a widely know voluntary CSR initiative at the global level. It offers a framework for reporting on economic, social and environmental issues, helping business communicate on

key sustainability issues (Leipziger, 2010, GRI, 2015). Another example is the ICC Business Charter for Sustainable Development, launched by the International Chamber of Commerce (ICC) in 1991. This Charter covers a total of 16 principles that aim at making the environment a priority for firms (Leipziger, 2010). One of the most prominent examples of voluntary CSR initiative at the global level is, however, the United Nations Global Compact. More details on this initiative are provided on the next section.

## 3.2.2.3 The United Nations Global Compact

The UNGC is a prominent example of an international CSR initiative, being considered the largest one in the world (Arevalo et al., 2013). Participation has grown significantly over time, from 42 firms when the initiative was launched in 2000, to 8,000 business participants from 145 countries globally (UNGC, 2013h). This section will provide some background information on the UNGC.

## How did the UNGC emerge?

In 1999, the then UN Secretary General Kofi Annan, gave a milestone speech at the World Economic Forum in Davos (Rasche and Kell, 2010, McIntosh et al., 2004b). In this speech, Annan invited businesses to "initiate a Global Compact of shared values and principles, which will give a human face to the global market" (UN, 1999). The speech had a strong positive response from businesses and governments alike and in July 2000, after gathering the support of NGOs, labour organisations and several UN agencies, the United Nations Global Compact (UNGC) was formally launched in New York (Rasche and Kell, 2010).

Important changes had to happen in the relationship between businesses and the UN, and ideologies had to be overcome, for the UNGC to be able to exist and succeed in its current form (Rasche and Kell, 2010). In the 1950s the UN adopted a posture of distance from business as the Cold War context required impartiality towards both market and planned economy nations (Therien and Pouliot, 2006). In the 1960s, the UN's attitude turned into animosity towards business, and the institution established a regulatory approach towards the private sector (Therien and Pouliot, 2006). In late 1980s, the end of the Cold War and the increasing process of globalisation, combined with the rise of neoliberalism, generated major changes in the UN's operating environment (Utting, 2001, Witte and Reinicke, 2005). To our present interest, there was growing recognition that business could also be part of the solution for many of the

development issues the UN aimed at tackling (McIntosh et al., 2003). The UN began a process of opening to non-state stakeholders (Witte and Reinicke, 2005); in a format known as "complex multilateralism" the UN started promoting partnerships with non-state actors, especially from the private sector (Utting, 2001). It was in this context that the UNGC emerged.

# What is the UNGC?

The UNGC is a strategic policy initiative aimed at engaging businesses in the mainstreaming of ten universally accepted principles into business practices, and in supporting UN goals (UNGC, 2013f).

Table 6: The ten principles of the UNGC

Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights Principle 2: make sure that they are not complicit in human rights abuses
Labour	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining Principle 4: the elimination of all forms of forced and compulsory labour Principle 5: the effective abolition of child labour Principle 6: the elimination of discrimination in respect of employment and occupation
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges  Principle 8: undertake initiatives to promote greater environmental responsibility  Principle 9: encourage the development and
Anti-corruption	diffusion of environmentally friendly technologies Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery

The UNGC offers firms a platform for the development, implementation and reporting of responsible and sustainable corporate policies and practices.

The UNGC currently is the largest CSR initiative in the world (Arevalo et al., 2013). Participation has grown significantly over time, from 42 firms when the initiative was launched in 2000, to over 12,000 participants, including more than 8,000 businesses from 145 countries globally (UNGC, 2013h). Firms whishing to participate commit to the 10 UNGC principles (Bernhagen et al., 2012). These

enjoy global consensus and are based on the following UN conventions: The Universal Declarations of Human Rights (Principles 1 and 2), The International Labour Organization's Declaration on Fundamental Principles and Rights at Work (Principles 3 to 6), The Rio Declaration on Environment and Development (Principles 7 to 9) and The United Nations Convention Against Corruption (Principle 10) (Arevalo et al., 2013). Participants also commit to support UN goals and issues.

# Becoming a participant

To become a participant, firms need to send a letter of commitment to the UNGC, signed by the chief executive or equivalent, and addressed to the UN Secretary-General (UNGC, 2013e). To maintain participant status, firms are required to submit an annual communication on progress (COP), reporting on their progress in implementing the commitments it made to the UNGC. Finally, firms are asked to make a regular annual financial contribution to the UNGC, which is proportional to the annual sales or revenues (UNGC, 2013e).

Benefits for participation are varied. The UNGC highlights the following: opportunity to adopt an established and globally recognised framework for the management of ESG issues; participate in a platform to the sharing of best practices for common challenges; access to the UN's knowledge in sustainability issues and to the UNGC's tools and resources; opportunity to engage in sustainability solution in partnership with several business and non-business stakeholders; finally, the opportunity to engage the firm's value chain in sustainability efforts, through the UNGC's local networks (UNGC, 2013e). One could argue that benefits are both related to legitimacy (for example, adopting a globally recognised framework based on universally accepted principles) and efficiency (for example, access to the UN's and UNGC's knowledge, tools and resources), catering for different motivations and drivers. The appeal of the benefits for becoming a participant is arguably reflected in the growing number of firms joining the initiative every year.

Change through learning, leadership and accountability with integrity measures in place

The UNGC, however, aims not only at expanding its participant's base but also at influencing participants' behaviour in regards to the commitments they sign up for. The UNGC's change model is based on the fundamental idea that through dialogue and partnership projects firms can demonstrate responsibility and learn

from all actors involved (Rasche, 2009a). Through learning and dialogue events and partnership projects, the initiative aims at engaging firms and their stakeholders in discussion, development and implementation of solutions to sustainability challenges, as well as in the sharing of best practices and the building of relationships and trust (Rasche, 2009a). At the national/local level, the UNGC networks help to translate the principles into the local context and promote learning amongst participants in light of firms' on-the-ground reality (Rasche, 2009a).

In addition to these learning and leadership elements, transparency and accountability through disclosure of progress is also an important element of influencing behaviour. While this is not without shortcomings - it has been acknowledged that the overall quality of the COPs needs improvement (Rasche and Kell, 2010), for example - it arguably fosters a social vetting mechanism (Rasche, 2009a), providing the means for stakeholders to monitor participants' performance, and ultimately exert pressure on them for committed implementation of the principles.

Finally, the UNGC has integrity measures in place to try to curb opportunistic behaviour. For one thing, participants are required to demonstrate implementation of the principles through an annual report called communication on progress (COP). Firms are required to submit a COP within one year from becoming a participant, and a new COP every year after that. Firms that fail to meet the deadlines are subject to sanctions. Failing the first deadline puts them into non-communicating status; those not submitting a report for a second year are expelled from the initiative.

Why does it make a relevant case for this thesis?

A number of reasons make the UNGC a relevant case study for this work, namely:

1. The UNGC is the largest voluntary CSR initiative in the world, gathering over 12,000 participants, including more than 8,000 businesses from 145 countries. It gathers an enormous variety of firm sizes, industries, and nationalities, making it a truly global and diverse CSR initiative, and offering a unique universe to work with in exploring the phenomenon of voluntary CSR initiatives as a new way of governing corporate behaviour. It offers a unique opportunity to study this diverse universe and arguably none would offer such a large universe to work with.

- 2. The UNGC, on its spotlight position as the largest CSR initiative in the world and the one backed by the UN, is watched closely by supporters and critics of this model of decentralised institutions through voluntary CSR initiatives. Arguably its success or failure may have an impact on this model as a whole. Therefore, knowledge on aspects that make the initiative more or less effective in attracting firms and getting them to abide to the commitments made, is very valuable for both academics and practitioners.
- 3. Despite growing levels of sign up and interest in the UNGC, pressing questions remain open in the literature, notably in regards to drivers for joining and performance.
- 4. The UNGC is an UN-led initiative. Having the backing of the UN arguably grants the initiative a legitimacy from the on-set that other voluntary CSR initiatives may not have been able to offer in their early days. In addition, the UNGC is based on principles, rather than codes or standards, and is designed as a leadership platform (Rasche and Kell, 2010). All this makes the UNGC a unique example of voluntary CSR initiative, which is worth exploring further.

# 3.3 To what extent institutional forces shape firm's decision and timing to join voluntary CSR initiatives/the UNGC?

Voluntary CSR initiatives may take different forms but they all aim to influence firms' behaviour to achieve higher corporate social and environmental performance. The literature has theorised about reasons for firms' decision to join such voluntary initiatives.

### 3.3.1 Firms' motivations driving the decision to join

In regards to motivations to adopt an initiative, the literature is largely characterised by two approaches. The first builds on the rational actor model, and proposes that an organisation adopts a new practice in views of achieving efficiencies and improved economic performance (Tolbert and Zucker, 1983, Kennedy and Fiss, 2009). The other focuses on the social embeddedness of organisations and the importance of their institutional environmental in shaping their decision (Tolbert and Zucker, 1983, Kennedy and Fiss, 2009). Here the

emphasis is the firm's search for legitimacy, for approval from its stakeholders (Bansal and Bogner, 2002).

### 3.3.1.1 Voluntary CSR initiatives' role in conferring legitimacy

As stated by Perez-Bastres et al (2011: 845) "If the organisation wishes to enhance its won legitimacy in an organisational field where SD [sustainable development] issues have become more salient and tied to survivability, then it would make good sense to sign or ally with another organisation that has an already established and legitimised SD charter or mandate (e.g. the UNGC)". Engagement in voluntary CSR initiatives can signal to stakeholders the firm's commitment to progressive sustainability practices, going beyond legislation (Delmas and Montes-Sancho, 2011, Potoski and Prakash, 2005a). This gesture may generate in return goodwill from its stakeholders and ultimately ensure legitimacy (Potoski and Prakash, 2005a). An external endorsement of legitimacy may then lead to an increase of flow of resources to the firm, which may take a number of forms (Doh et al., 2010). In their relationship with regulators, for example, firms may find that adoption of a voluntary practice may contribute to fewer controls and monitoring, banks and insurers may see participation as reducing the risks of environmental incidents, among others (Potoski and Prakash, 2005a). All of these have the potential to make a positive contribution for the firm survival in the long run.

The signalling and consequent legitimising value of such initiatives may be limited though, depending on context (Delmas and Montes-Sancho, 2011). For example, where stakeholders mistrust the actual capacity of the initiative at hand to effectively improve CSP, the initiative's power to confer legitimacy may be at stake (Delmas and Montes-Sancho, 2011). The UNGC, even if not having the mandate or the resources to monitor and control participants' performance, has been criticised for not imposing enough controls on firms after these join (Mueckenberger and Jastram, 2010).

### 3.3.1.2 Voluntary CSR initiatives' role in increasing efficiency

On another vein, it has been theorised that voluntary CSR initiatives may increase firm efficiency in a number of ways. For one thing, it has been proposed that voluntary environmental standards such as ISO14001 may contribute to improved environment performance (Delmas and Montes-Sancho, 2011), which may arguably be associated with a reduction in costs (Potoski and Prakash, 2005a). Such standard may also contribute to avoid damaging impact (for example by reducing environmental liability) due to better management

systems in place (Delmas and Montes-Sancho, 2011). As highlighted by Bansal and Bogner (2002) another key economic benefit of joining a voluntary CSR initiative is the ability to sell to customers that require for example, environmental management certification. While his example focus on ISO14001, there are also examples of the use of the UNGC to manage sustainability in the supply chain. For one thing, Schneider Electric<sup>7</sup> has been working with its suppliers since 2004 in supporting them to publicly commit to and implement the UNGC principles.

More specifically in regards to the UNGC one cannot refrain from mentioning the learning element of the initiative. The UNGC aims at providing a learning space for participants, which is enacted through dialogue and the sharing of best practices on forums organised by the UNGC or its supporters (Rasche, 2009a). The UNGC often produces publications with best practices (Rasche, 2009a, Mueckenberger and Jastram, 2010) which are widely available. This learning process could arguably result in improved practices and efficiency amongst participating firms in regards to the management of sustainability issues.

While these arguments are compelling, there is also controversy in that. Melnyk et al (2003) argue that the decision to become ISO14001 certified constitutes a dilemma for many American firms, because while it promises to reduce environmental related costs and improve processes, the costs and benefits associated with it remain difficult to predict. Bansal and Bogner (2002) point that even within the same firm benefits obtained from ISO14001 may be mixed. Citing the example of Jutras division of the Meridian Magnesium Inc., the authors point that while the company reported savings of almost \$2 million following a \$45,000 investment on a ISO14001 certified EMS, similar projects within the same company yielded shy or no results in the form of savings (Bansal and Bogner, 2002). On a similar line, the UNGC has been criticised for having principles that are too broad and therefore difficult to implement, as they do not provide clear guidance on the expected conduct for each principle (Rasche, 2009a). This criticism has raised questions on the UNGC's capacity to actually lead to improved practices within firms.

### 3.3.2 Context driving the decision to join

Voluntary CSR initiatives have different requirements, which makes for varied costs for participation. Becoming ISO14001 certified, for example, imposes high

<sup>&</sup>lt;sup>7</sup> http://www.schneider-electric.com/sites/corporate/en/group/sustainable-development-and-foundation/social-commitments/social-commitments.page

costs on firms (Delmas and Montes-Sancho, 2011) in preparing for certification, being certified and maintaining the required documentation afterwards. In the case of the UNGC, while the actual cost of joining is arguably low (send a letter to the UN offices in New York), the costs of maintaining participant status may be higher (producing an annual report on progress and making an annual financial contribution to the initiative).

Besides the direct financial costs of joining a voluntary CSR initiative (or maintaining participant status), it is also necessary to consider the self-imposed controls that stem from the act of joining (Bennie et al., 2007). The UNGC, for example, while not actively verifying and monitoring participant performance, arguably imposes some restrictions on corporate behaviour by disclosing participant's commitment to the initiative. This commitment, as well as participants' communication on progress, are openly available so relevant stakeholders can use these to hold participants accountable for their CSP. Other initiatives, such as the ISO14001, offer more direct control of firms' actions, through certification.

Therefore, while the costs of joining voluntary CSR initiatives are quite concrete, the actual benefits remain uncertain. Yet, several firms decide to join voluntary CSR initiatives every year. It is arguably necessary to look within and also beyond the boundaries of the firm to fully understand corporate behaviour in this regard. The literature has proposed that some characteristics of the firm, its industry and its environment may increase pressures and benefits for firms to join voluntary CSR initiatives. Bansal and Bogner (2002) propose four relevant contexts that may encourage firms to become ISO 14001 certified: firms in highly polluting industries, those exposed to a high degree of internationalisation (either through exports or subsidiaries), firms engaged in a broad network of stakeholder relationships and firms in industries with high levels of adoption of a standard will all have higher incentives to adopt such standard. Building on their work, one can argue that the following elements may influence firms' decision to join voluntary CSR initiatives in general and the UNGC in particular:

### 3.3.2.1 Cleaning your act or shouting your credentials

Firms belonging to industries known for its high environmental impact are arguably subject to greater stakeholder scrutiny, and therefore are under greater pressure to demonstrate alignment with societal goals and attention to these matters (Bansal and Bogner, 2002). Such firms may face real losses if their customers or other stakeholders pull back support for them due to poor (real or

perceived) sustainability performance (Bansal and Bogner, 2002). These firms, therefore, find their legitimacy to be more at risk, as well as their economic interests, and as a result, have greater incentives to engage in voluntary CSR initiatives to signal to stakeholders their commitment and willingness to address such issues. This proposition has been confirmed by a number of studies. For example, Bernhagen and Mitchell (2010) and Bennie et al (2007) found that firms in the extractive industry are more likely to join the UNGC than firms from other industries. Similarly, Perez-Bastres et al (2012a) demonstrated that belonging to a highly polluting industry was positively associated with firm sign up to self-regulatory codes of conduct. Conversely, firms in "cleaner industries" or high sustainability performers may arguably have greater incentives to join such initiatives as a mean to display their good deeds and increase legitimacy in the eyes of stakeholders.

### 3.3.2.2 Dealing with global supply chains

Secondly, it is proposed that engagement in voluntary CSR initiatives may "ease globalisation" (Bansal and Bogner, 2002). Where there is significant physical, social, cultural and institutional distance between the firm and elements of its supply chain, information asymmetry tends to be higher, potentially leading to lack of trust and inefficiencies (King et al., 2005, Tambunlertchai et al., 2013). In those cases, the need for a "green passport" or a mean to show responsible behaviour that is generally recognised as legitimate – such as an international voluntary CSR initiative - may help fill in the information gap between the parts (Bansal and Bogner, 2002, Tambunlertchai et al., 2013). As a result, firms in a highly globalised supply chain may have greater incentives to join voluntary CSR initiatives.

More specifically, firms may need "sustainability credentials" to be able to trade with some international customers (Bansal and Bogner, 2002, Tambunlertchai et al., 2013, Neumayer and Perkins, 2004). In a study of adoption of ISO14001, for example, King et al (2005) found that the greater the physical distance between a firm and its buyers, the greatest the likelihood of these firms to become certified. Bansal and Bogner (2002) mention the example of Bahia Sul Celulose. This was the first firm to be ISO14001 certified in Brazil, in anticipation of certification requirements expected from its European customers.

Equally, highly internationalised firms may find voluntary CSR initiatives useful to coordinate their own sustainability approach across subsidiaries (Bansal and Bogner, 2002) and suppliers, protecting the firm against environmental and

reputation liabilities (Neumayer and Perkins, 2004). In a study of the adoption of ISO14001 by firms in Thailand, Tambunlertchai et al (2013) found that firms that receive foreign direct investment (FDI) are more likely to become ISO14001 certified. This was even more acute for Thai firms receiving FDI from more stringent regulatory environments (i.e. OECD countries) and environments where ISO14001 is valued (i.e. countries with a high number of certified facilities) (Tambunlertchai et al., 2013). Bansal and Bogner (2002) also point to the example of Ford Motor Company – the firm has adopted worldwide certification for its operations, which has proved a good system to coordinate Ford's global efforts.

One may argue that different types of international voluntary CSR initiatives may provide different benefits in the form of "sustainability credentials". If the key challenge relates to information asymmetry and controlling suppliers and other elements of a lengthy and/or globalised supply chain, one could point that initiatives which offer some third party control – for example, through certification mechanisms such as the ISO14001 – may be more powerful in protecting or proclaiming firms legitimacy. However, there is evidence that non-certifiable initiatives such as the UNGC have also been used as a tool to address these challenges.

The UNGC does not offer a certification or third-party control. Nevertheless, it has also been used as a tool to promote sustainability in the supply chain. For example, Schneider Electric<sup>8</sup> has been working with its suppliers since 2004 in supporting them to publicly commit to and implement the UNGC. Equally, Berliner and Prakash (2010) found that the level of UNGC sign up in the focal country was positively and significantly associated with the level of UNGC sign up in focal country's key export markets.

### 3.3.2.3 Dealing with critical voices or an extensive network

Non-governmental organisations (NGOs) have an important role in defining and advancing standards and norms related to CSR, either by helping design them, or by exercising voice and mobilising resources – for example through boycotts – to promote these norms (Berrone et al., 2013). As such, NGOs, as well as other social actors such as labour organisations for example, exert strong normative pressures on firms to change the traditional modus operandi and impose more sustainability minded roles and responsibilities for businesses

<sup>8</sup> http://www.schneider-electric.com/sites/corporate/en/group/sustainable-development-and-foundation/social-commitments/social-commitments.page

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(Perez-Batres et al., 2011, Berrone et al., 2013, Delmas and Montes-Sancho, 2011, Campbell, 2007, Bernhagen et al., 2012).

Firms, seeing their legitimacy potentially at peril, will seek to engage with these actors, and ultimately tend to conform to these pressures, in order to protect their legitimacy. Therefore, it has been proposed that stronger presence of these counterbalancing voices in society is likely to be associated with greater firm adoption of voluntary CSR standards and norms (Perez-Batres et al., 2011, Berrone et al., 2013, Delmas and Montes-Sancho, 2011, Campbell, 2007, Bernhagen et al., 2012). The literature has found evidence for this claim. Berrone et al (2013) found that normative pressures from NGOs have a positive and significant effect on firms' efforts to engage in environmental innovation. Lim and Tsutsui (2012) found pressure from international NGOs to be consistently positive and significant for sign up to both the UNGC and the GRI.

While this is a compelling argument, which has been supported by evidence, there have also been results that contradict this proposition. Perez-Bastres et al (2011) found that NGO participation in the UNGC is not significantly related to the likelihood of firms in the country to join the initiative. Conversely though, the participation of other counterbalancing voices such as academe, are found to be associated with higher sign up (Perez-Batres et al., 2011). Berliner and Prakash (2010) found support for their proposition that higher international NGO presence in a country is likely to be associated with lower UNGC sign up in that country, given the criticism of these organisations towards some UNGC's characteristics. These mixed results call for further analysis.

Bansal and Bogner (2002) go beyond NGOs and other critical voices to propose that firms engaged in a broad set of stakeholder relationships or an extensive network in general, will find more incentives to adopt CSR norms and standards. For example, firms with several suppliers may require ISO14001 certification from them to protect its own reputation. In addition, for firms with a large customer base, being ISO14001 certified may help generate trust and credibility between the firm and its customers (Bansal and Bogner, 2002).

### 3.3.2.4 Following the crowd

Bansal and Bogner (2002) also highlight that a context in which a large number of peers have adopted an initiative, may create incentives for firms to join. Even if a firm has processes and procedures in place to address the issues at hand (in the case of ISO14001 for example, environmental management systems) it

may become difficult to justify not having the "stamp of approval" that such initiative can confer (Bansal and Bogner, 2002).

These mimetic mechanisms have also been identified in the context of participation in the UNGC. Perez-Bastres et al (2010) found that Latin American firms registered in the NYSE (New York Stock Exchange) are more likely to join voluntary CSR initiatives – namely the UNGC and the GRI – than non-listed Latin American firms, as they tend to imitate behaviour of other listed companies, i.e. of peers perceived as successful by them. Perez-Bastres et al (2010), using a sample of European and Latin American firms, found similar results with firm association with the NYSE being significantly and positively related to firms' decision to join the UNGC.

Building on this work, the literature points to two more contexts that may encourage firms to engagement in voluntary initiatives: being big and wealthy and dealing with stringent regulation and regulators.

### 3.3.2.5 Dealing with regulators, regulation and monitoring

The role of the government in influencing CSP, as the regulatory authority with coercive power over firms, has been previously discussed in the literature (Campbell, 2007). For example, Campbell highlights the extent to which food safety and quality practices in the meat packing industry has improved after the Department of Agriculture started to regulate the industry in the United States (Campbell, 2007). This relation is not always straight forward though, with other elements moderating it, such as for example: the state capacity to monitor and enforce regulations, the institutional design of such regulations, among others (Campbell, 2007). More specifically in terms of voluntary CSR initiatives, it has been argued that high (actual or perceived) level of regulation and monitoring (Perez-Batres et al., 2012a) as well as a perception of threat of increased regulation, provide higher incentives for firms to join voluntary initiatives.

Equally, it has been proposed that when governments demonstrate support for the initiative and issues associated with it or for the institutions behind it, firms may be more inclined to join (Bernhagen et al., 2012). In a study of drivers for joining the UNGC, though, Bernhagen et al (2012) found no evidence to support this claim — i.e. green party participation in the government and country's support to the UN had no significant statistical relationship with UNGC sign up. Delmas and Montes-Sancho (2011), however, found government commitment to environmental issues to be a positive and significant influence in the early

stages of adoption of ISO14001 standards, although its importance decreases overtime. Here again conflicting evidence emerges, calling for further investigation.

### 3.3.2.6 Being big and wealthy

"Being big" has been largely explored in the literature as an element influencing corporate social performance. The underlying argument is that the larger the organisation, the more visible are its actions and therefore more attention and scrutiny it is likely to receive from stakeholders (Johnstone and Labonne, 2009, Schembera, 2012). Therefore, larger firms are likely to be under greater pressure to conform to society's expectations and demands, and therefore more likely to respond to such pressures in order to enhance its legitimacy (DiMaggio and Powell, 1983). A number of papers have found evidence for the influence of size in regards to engagement in voluntary CSR initiatives. Bennie et al (2007) and Bernhagen and Mitchell (2010) found larger firms to be more likely to join the UNGC. Tambunlertchai et al. (2013) uncovered firm size to be a determinant of ISO 14001 certification.

"Being wealthy" or having slack resources has also been pointed as a factor influencing firms' CSP. Having slack resources arguably allows firms the flexibility and discretion to engage in new ventures, practices or routines (Perez-Batres et al., 2012a, Johnstone and Labonne, 2009), such as for example, joining a voluntary CSR initiative (Campbell, 2007). Perez-Bastres et al (2012a) found slack resources to be positively and statistically associated with firm participation in the GRI. The same was not confirmed for joining in the UNGC though. Berrone et al (2013) found slack resources, when associated with normative pressures, to be positively associated with firms' efforts for green innovation; However, the authors found that at higher levels of slack, there was a negative effect on environmental innovation when associated with regulatory pressures. These somewhat contradicting results on the role of slack resources may suggest that firms with enough resources may prefer to pay legal and economic sanctions than engage in major change in its processes and products, or that they find legitimacy and social sanctions from normative actors to present a higher risk than economic penalties imposed by regulatory actors, or even that regulatory actors are satisfied with more symbolic engagement, not requiring innovation to take place (Berrone et al., 2013). In any case, there seems to be an interesting phenomenon there, which calls for further exploration.

## 3.3.3 Understanding speed of adoption: why some firms join earlier than others?

Despite the fact that many of voluntary CSR initiatives have existed for a number of years, more firms decide to join every year, suggesting that the pace and pattern of adoption varies across firms. In the case of the UNGC, 42 firms from 14 countries joined the initiative when it was launched in 2000<sup>9</sup>. As of 2013, the UNGC had over 7,000 business participants spread across over 145 countries<sup>10</sup>. In the following manner, the ISO14001 was present in 22% of UN member countries in 1996. This number increased to 50% in 2000 and 70% in 2006, 10 years after the launch of the standard (Delmas and Montes-Sancho, 2011). Considering that even a considerable time after their launch benefits associated with adoption of voluntary CSR initiatives are still found to be questionable, what influences these organisations to early adopt in a time when risks and uncertainty are much higher?

Albuquerque et al (2007) propose that diffusion is a contagious process that spreads through interactions among actors within some sort of network. The nature of the diffusion may vary according to the type of proximity that allows for this exchange to happen, namely: geography, trade and culture (Albuquerque et al., 2007). Through interactions, firms collect evidence on the benefits of adopting a certain practice. Once a firm decides it has gathered enough evidence – or as the authors say, once it has reached its evidentiary threshold – the firm decides to join or adopt the practice at hand.

The amount of evidence requested for a decision to be made, as well as the time it takes to gather it, will vary across firms (Albuquerque et al., 2007). The diffusion of a new practice therefore will depend primarily on the perception of benefits for adoption and also on the number of adopters (Castka and Balzarova, 2008), the latter supporting the communication of the former. Late adopters will generally adopt a practice quicker than early adopters (Viadiu et al., 2006). Once the new practice achieves a critical mass, the perceived risks associated with adopting it drops (Albuquerque et al., 2007). Therefore, the evidentiary threshold for late adopters tends to be lower, speeding the decision making process. When comparing cross-national diffusion of a practice, this may be observed in higher rates of within country diffusion in late adopting countries. Eventually, late adopters may catch up with earlier adopting countries (Albuquerque et al., 2007).

<sup>&</sup>lt;sup>9</sup> Source: UNGC dataset

<sup>&</sup>lt;sup>10</sup> http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html

Understanding the characteristics of an initiative is key to understand its pattern of diffusion (Castka and Balzarova, 2008). Castka and Balzarova (2008) argue, for example, that studies on the diffusion of ISO14001 and ISO9000 may not have reasonable predictive power to explain the spread of ISO26000, given that the latter is not a management system nor it is certifiable. While the authors do not elaborate further on this thought, one could argue that such characteristics may influence perceived risks and benefits associated with the adoption of a new practice. For example, it is not unreasonable to propose that a legitimate third party stamp of approval such as a certification may present a stronger immediate perceived benefit for the adopter than a simple joining statement. Equally, because management systems are clearly specified in such standards, they may arguably also be a more valuable tool in communicating to stakeholders the organisation's practices and commitments, as external stakeholders are more likely to know what exactly they entail. In view of these challenges, the authors point to the need to go beyond the literature on certifiable standards, also looking into the diffusion of organisational practices, innovation and technologies to fully understand the diffusion of a voluntary initiative such as the ISO26000 (Castka and Balzarova, 2008), and one cold argue such as the UNGC as well.

### 3.3.3.1 Motivations to adopt novelties and impact on speed of adoption

As discussed before, two explanations on motivations for adoption of a practice are prominent in the literature, namely a search for legitimacy or approval from its stakeholders and a search for greater efficiency or superior performance (Bansal and Bogner, 2002). The two-stage model proposed by Tolbert and Zucker (1983) integrates these two approaches in light of speed of adoption and suggests that while early adopters focus on technical benefits from adoption, late adopters are more concerned about ensuring their legitimacy.

Neo-institutional theory also reconciles these visions, and proposes that early adopters, i.e. those that adopt a practice in the early stages of the institutionalisation process, do so in views of achieving improved performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008). As the institutionalisation of a practice progresses, the decision to adopt it becomes more of a requirement than a choice, as normative and cultural pressures reach a point where non-adopters risk to be seen as deviants from the norm, or behind the time (Scott, 2008, DiMaggio and Powell, 1983). In other words, adopting the new practice becomes more a matter of ensuring legitimacy

following a logic of appropriateness, than achieving efficiency, following a sense of instrumentality (Scott, 2008, DiMaggio and Powell, 1983).

This two-stage model of diffusion has recently been questioned by some authors (Kennedy and Fiss, 2009). Kennedy and Fiss (2009), in a study of the diffusion of total quality management in US' hospitals, found that economic and legitimacy motivations to adopt a new practice coexist among early and late adopters. Similar concerns have been raised in the context of the adoption of voluntary CSR initiatives. Arevalo et al (2013) in a study of the adoption of the UNGC in Spain, suggest that early UNGC adopters were mainly focused on image gains, rather than economic gains. The authors defend that, being UN-led, the UNGC has been widely known from its inception and therefore firms would see the potential for image gains from the early days. Also, they add, a business case for signing up was not discussed in the early days. Therefore, it was only among late adopters that economic benefits interest emerged, while still keeping an interest in image gains (Arevalo et al., 2013).

### 3.3.3.2 Attributes and context influences on speed of adoption

Besides motivations, firm attributes have also been pointed as influencing early adoption of voluntary CSR practices (Scott, 2008, Arevalo et al., 2013). For one thing, firm size is proposed to be associated with early adoption. The reasons for this are many: larger organisations are more visible and therefore subject to greater scrutiny and pressures by stakeholders, larger organisations generally have more resources and therefore may be more prone to invest in new practices, and larger organisations are more sensitive to environmental changes (Scott, 2008). Studies provide evidence that larger firms were more likely to become early adopters of ISO14001 certification (King and Lenox, 2001) and to join the UNGC early in the Spanish context (Arevalo et al., 2013).

King and Lenox (2001) propose that besides size, two other firm attributes make adoption of a new practice "easier", and therefore are likely to lead to early adoption. Studying the case of ISO14001 certifications, the authors propose that organisations with slack resources are more likely to take the risk of adopting a new practice in a time that uncertainty regarding benefits for adoption is still very high. The authors also propose that previous investment and experience in ISO9000 certification may lead to early adoption of ISO14001 (King and Lenox, 2001).

Good previous environmental performance has also been pointed as a predictor for the adoption of voluntary environmental initiatives (Delmas and Montes-Sancho, 2010). Bansal and Hunter (2003), for example, found that firms with higher environmental legitimacy and fewer environmental crisis were more likely to be early adopters of ISO14001. The authors propose that such firms would become ISO14001 certified as a means to reinforce their position or strategy in regards to CSR and would accrue image benefits and increased legitimacy by adopting it early.

It is important to highlight however that organisational level variables, while important determinants of adoption on the early stages of the diffusion of new practice, may see their predicting power reduce overtime once the practice or initiative at hand becomes more institutionalised (Tolbert and Zucker, 1983). In a study of the diffusion of civil service reform in the United States, Tolbert and Zucker (1983) found that a set of city's characteristics (such as size, percentage of immigrants, among others) were important determinants for the adoption of the reforms in the early stages of the diffusion of the new practices. However, their predicted power dropped over overtime, and very sharply in the last period. The authors propose that as the civil service reform was increasingly taken for granted and seen as legitimate, cities began to adopt it as a "social fact" and cities' characteristics became less and less relevant (Tolbert and Zucker, 1983).

In this context, some authors have proposed that one needs to also look beyond the firms' boundaries in order to understand the pattern of adoption of new practices. Building on institutional theory, Delmas and Montes-Sancho (2011) theorise that countries where a new practice was adopted earlier are marked by different institutional pressures than those countries where the practice was adopted later in time. The authors argue that coercive or regulatory forces play a bigger role in the take-up phase of a new practice, by providing rewards and penalties for adoption and showing potential adopters the benefits of the innovation. As institutionalisation progresses normative and cognitive forces arguably become stronger in promoting adoption of the new practice (Delmas and Montes-Sancho, 2011).

As discussed in section 2.1.3.1, the regulative pillar with its coercive mechanisms is often associated with the political system, or the state (Berrone et al., 2013, Delmas and Montes-Sancho, 2011). Governments may provide rewards for adoption or impose sanctions for non-adoption of a new initiative or practice. As proposed by Tolbert and Zucker (1983: 27), once a new practice is

legitimated by higher-level organisations, such as the government for example, "dependant organisations respond by rapidly incorporating the element into their formal structure".

These coercive mechanisms can be very efficient in promoting sign up, notably in the early stages of institutionalisation when there is greater uncertainty in regards to the benefits that can be accrued with participation (Delmas and Montes-Sancho, 2011). Therefore, the greater the government's support to the issues covered in the initiative, the more involved is the government in the design of the initiative, the more positive the government's attitude towards the initiative, the more likely it will be to provide firms with incentives for adoption and therefore the more likely firms in the country will be to adopt the standard or join the initiative in the pre-institutionalised period (Delmas and Montes-Sancho, 2011).

The government is not the only actor to exercise pressures on firms though. The community, organised as non-governmental organisations (NGOs), may also exercise normative pressure over firms to adopt a certain practice (Delmas and Montes-Sancho, 2011). NGOs have gained prominence over the last decades, and have been an important voice in seeking to define new roles and responsibilities for businesses (Perez-Batres et al., 2011). This pressure may be especially prominent in the early phases of adoption of a new initiative, as NGOs may turn their focus to newer initiatives as the one at hand becomes more widely diffused (Delmas and Montes-Sancho, 2011). For one thing, Delmas and Montes-Sancho (2011) found that the role of civil society was a stronger predictor in the early phases of the adoption of ISO14001, as compared to later periods.

Proximity through trade and geographic proximity have also been revised in the literature. Delmas and Montes-Sancho (2011) proposed and found evidence to show that trade ties are an important predictor in all phases of the diffusion of a standard. Geographic proximity, on the other hand, is proposed to require a larger number of adopters to serve as an effective vehicle of diffusion of a new initiative (Delmas and Montes-Sancho, 2011), therefore seeing its role increase in later phases of adoption. The authors found evidence of that in a study on the diffusion of ISO14001, with geographic proximity not a significant predictor in the early phases of the diffusion of ISO14001, but becoming significant in the later phases (Delmas and Montes-Sancho, 2011). One could argue that enough

volume of adoption is needed in a country for it to be remarked across borders through proximity, as very few adopters would probably disperse the information.

Finally, the incidence of other certifications/standards of similar nature in a country is proposed to be associated with the likelihood of adoption of voluntary CSR initiatives. In a study of the implementation of ISO14001, Delmas and Montes-Sancho (2011) found that a greater number of ISO9000 certifications in a country was associated with higher ISO14001 in all stages of adoption, i.e. it was an important predictor in early as well as later phases of ISO14001 diffusion in a country.

In a nutshell, factors influencing firm decision to adopt a new practice in the early stages of diffusion are multi-level. They may be related to firm attributes, to industry characteristics or to features of the firm's operating environment, such as for example their home country.

## 3.3.4 Empirical evidence on drivers for joining and speed of adoption in the UNGC

This section will review empirical evidence that focuses specifically on the case of the UNGC. While some authors have posed questions about drivers for joining the UNGC (Perez-Batres et al., 2010, Perez-Batres et al., 2011, Perkins and Neumayer, 2010), not many studies have sought to respond this question empirically. A total of 12 studies were identified in the literature: nine quantitative, one qualitative case study and two presenting survey results. Interest on this topic is mainly recent, with eight out of twelve studies published from 2010.

Most of the quantitative studies (eight) were interested in understanding national level factors associated with higher level of UNGC sign up. This is hardly surprising given that the UNGC is a United Nations led initiative and the largest global CSR initiative, therefore naturally raising questions about variations across countries and the role of national contexts in these. However, fewer showed interest in firm level factors (five) (Bernhagen and Mitchell, 2010, Bennie et al., 2007, Perez-Batres et al., 2012a, Perez-Batres et al., 2010, Perez-Batres et al., 2011), and even fewer (three) looked into industry as an independent variable (Bennie et al., 2007, Perez-Batres et al., 2012a, Bernhagen and Mitchell, 2010). In regards to geographic coverage, most studies were multi country (8). Once again, this is not surprising given the global nature of the UNGC. Finally, the majority of the studies were cross-sectional (6), compared to only 3 longitudinal articles. Factors that were found in previous

papers to influence corporate sign up to the UNGC are summarised on the table below, and a review of the papers follow.

Table 7: Exploring drivers for joining the UNGC

National	Industry	Firm
- Headquarter in democratic	- Being in a high impact	- Larger size
country	industry (extractive, "dirty"	<ul> <li>UN Vendor status</li> </ul>
- Higher green party	industry)	- Listing in NYSE
participation		
- Higher UN commitment		
- INGO pressure in the		
country		
- Participation of		
organisations other than		
firms in the UNGC in the		
country (academic and		
NGOs)		
<ul> <li>Stakeholder pressure</li> </ul>		
- Liberal economic policies		
<ul> <li>Short-term trade relations</li> </ul>		
- Ties with European		
countries		
- UNGC density in country's		
inward and export trade		
partners		

Byrd (2009) explores the factors that led two major American-based international public relations agencies to join the UNGC. Based on in-depth interviews and document analysis, results suggest that while one of the agencies saw sign up as an opportunity to reinforce their commitment to the UNGC issues, the other decided to join due to a personal relationship between their Chairman and the former UN Secretary General Kofi Annan.

Perkins and Neumayer (2010) analyse the dissemination of corporate voluntary standards, comparing the global diffusion of ISO14001 and the UNGC. Authors find that national level factors can influence a country's receptivity to transnational influences. In the case of the UNGC, level of democracy has an important conditioning influence on receptivity to transnational forces. Transnationally, trade links with countries with higher UNGC membership density was found to influence signing up to the UNGC; similar findings were shown for FDI and business travellers (ibid).

Bennie, Bernhagen and Mitchell (2007) found that for the world's 2,000 largest companies, the decision to join the UNGC could be explained both by firm level and political or institutional factors. Firm size and participation in the extractive industry were positively and significantly associated to engagement in the

initiative in all cases. In addition, home country factors such as green party participation in the government and country commitment to the UN were found to be positively associated with joining the UNGC.

In a similar paper Bernhagen and Mitchell (2010) approach firm decision to join the UNGC as a form of corporate political activity. In a study of Forbes Global 2000 firms, the authors find the following factors to be determinants of firms' decision to join the UNGC: size (in sales), cost of exit (belonging to extractive industries), government involvement (being a UN vendor) and home country commitment to the UN (measured as recent commitments to UN environmental and human rights activities).

In a country-level study of UNGC participants in 145 countries in 2009, Bernhagen et al (2012) find a democratic regime and participation of organisations other than firms in the UNGC to be associated with higher levels of firm sign up to the UNGC. In another country-level study, Berliner and Prakash (2010) focused on UNGC participants in 89 countries between 2001 and 2007. They found that country embeddedness in international government networks encourages firms to join the UNGC, while country embeddedness in international NGOs networks discourages joining.

Also with a national level focus, Lim and Tsutsui (2012) analysed drivers for joining amongst UNGC participants between 2000 and 2007. The authors found presence of international NGOs in a country and neoliberal economic policies to encourage UNGC sign up in both developed and developing countries. Sign up of firms in developed countries, however, was also encouraged by launch of UNGC in the country and level of UNGC participation in their export destinations, whereas democracy was found to discourage joining among these firms.

Perez-Batres, Miller and Pisani have recently published two papers, focusing on the UNGC (Perez-Batres et al., 2010, Perez-Batres et al., 2011). The first paper focuses on 207 Latin American firms, and explores the impact of normative and mimetic pressures on firms' sign up to the UNGC and to the Global Reporting Initiative (Perez-Batres et al., 2010). Using three filters - commercial, state-signalling and distinguished peers – the authors find normative and mimetic forces to have an influence on Latin American firms' engagement in the UNGC, notably in regards to home country links with European countries (normative pressure) and firm listing on the New York Stock Exchange (mimetic pressure).

Their second paper focuses on drivers for joining the UNGC, using a sample of 394 large companies from Western Europe and Latin America (Perez-Batres et al., 2011). Results indicate that normative (represented as number of academic institutions participating in the UNGC in country i) and mimetic pressures (peer influence represented by listing in the NYSE) are better determinants of sign up than coercive pressures (government regulation represented as level of regulation in home country).

In a more recent paper of 1,145 publicly traded American firms, Perez-Bastres et al (2012a) analyse stakeholder pressures as drivers for firms' engagement in voluntary self-regulatory codes, including the UNGC. Findings suggest that "dirtier" industry, more slack resources, and higher scrutiny and pressure from some stakeholders are likely to influence firms' decision to join these initiatives.

In a survey of Spanish UNGC business participants, Arevalo et al (2010) found that both image and economic gains are important motivators for firms to join the initiative. In another survey and interviews with 29 UNGC participants, Cetindamar and Husoy (2007) found multiple motives to drive firms' decision to join, with both ethical and economic reasons mattering.

In regards to speed of adoption, while the literature on innovation and diffusion has covered a diverse pool of phenomena building valuable knowledge about these issues, little has been covered in regards to voluntary CSR initiatives – except maybe for the ISO14001 certification standard; notably, studies on the speed of adoption of the UNGC are extremely scarce (Arevalo et al., 2013). While many parallels can be drawn between ISO14001 and the UNGC, or between certifiable and non-certifiable initiatives, one cannot refrain from recognising that the presence or absence of a certification mechanism, especially in the early stages of diffusion where risk perception is generally greater, may lead to differences on patterns of diffusion and factors that may influence it. To the author's best knowledge, there was only one study on the UNGC that looked into speed of adoption (Arevalo et al., 2013). The study, however, was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption.

# 3.4 To what extent institutional forces shape performance in voluntary CSR initiatives / the UNGC?

With increasing levels of participation in voluntary CSR initiatives, there has also been increasing interest from practitioners and scholars alike on the matter of firm performance following sign up. This section will review the current literature on corporate performance in voluntary CSR initiatives. More specifically, it will look into factors that may moderate the relationship between sign up and performance, as well as the literature on the impact of joining the UNGC in CSP.

### 3.4.1 Does it always pay to keep a promise?

A point of concern for practitioners and scholars alike in regards to voluntary CSR initiatives is the potential for decoupling between firms' commitments and actual outcomes. Traditional views on decoupling are generally based on a cynical view of firm behaviour and portray decoupling as a binary choice (Crilly et al., 2012, Kim and Lyon, 2012). Decoupling is often seen as a "convenient arrangement" between firms and stakeholders, in which the latter turn a blind eye to the former's empty promise (Crilly et al., 2012). Decoupling has also been approached as "calculated deception", or an intentional action by the firm to default on a commitment in order to gain the legitimacy associated with it while avoiding the costs of full implementation (Crilly et al., 2012).

A more recent line of discussion proposes that decoupling is more nuanced than a "yes-or-no" decision, allowing firms to choose level of compliance in a continuum (Crilly et al., 2012, Kim and Lyon, 2012). In a study on voluntary reporting of greenhouse gas emissions, for example, Kim and Lyon (2012) compared self-reported emissions in the context of the US Department of Energy voluntary program for the reduction of greenhouse gas emissions, with a calculation of actual emissions using fuel usage data from the US electric utility industry. They propose that selective disclosure of performance can support symbolic management as firms may select the amount of unfavourable information they will release. The authors found a significant gap between actual and reported reduction in greenhouse gas emissions for participants in the voluntary program. Participants generally reported reductions that albeit real, did not show the full picture of an actual increase in total emissions (Kim and Lyon, 2012). In a similar line, Fig (2007) found in a study of Aracruz Celulose activities in Brazil that while the firm reported to be using water more efficiently, it failed to account for serious water depletion in its area of work due to the high water consumption of its eucalyptus plantations.

Similarly, a more recent discussion on decoupling proposes that there may be more beyond "bad intentions" in leading to the failure of keeping promises. Crilly et al (2012) add to this the role of "muddling through", or the failure to abide to commitments due not only to intentional deceit but also to a lack of expertise or

internal coordination in dealing with conflicting demands. On a similar line, Lim and Tsutsui (2012) in a study of engagement in the UNGC and the GRI propose that many organisations adopt global models with the intent of gaining legitimacy, but lack the capacity to implement them, resulting in a decoupling between commitment and action. They found that government endorsement in the form of UNGC launch in developing countries also leads to ceremonial commitment, by engaging firms that do not have the capacity to implement the principles (Lim and Tsutsui, 2012).

To our present interest, Kim and Lyon (2012: 01) highlight the fact that not all firms resort to the smilingly very profitable strategy of decoupling, suggesting that "symbolic management is useful for some firms under certain circumstances, but not for all firms nor in all circumstances". Firms' attributes and characteristics of its operating environment may create different incentives or disincentives for firms to engage in symbolic management. The behaviour explored here – performance in voluntary CSR initiatives – is particularly interesting because, given its voluntary nature, there are often no obvious forces to ensure that participants abide to their commitments.

While there are clear benefits for decoupling, costs of this decision are less explored in the literature. Kim and Lyon (2012) propose that firms incur in internal and external costs when decoupling. The former relates to resources used to implement the minimum to be able to claim and communicate compliance (Kim and Lyon, 2012). By definition, they will arguably always be lower than the cost of substantive (full) implementation. External costs, on the other hand, refer to risks associated with increasing scrutiny revealing discrepancy between firm's discourse and action (Kim and Lyon, 2012). This is arguably where most variation may be found, with different institutional arrangements providing incentives and constrains to symbolic or substantive engagement.

The fact that not all firms choose symbolic commitment suggests that these external costs may indeed vary for different firms, depending on the environment within which they operate. One can argue, therefore, that an environment that can increase the external costs of decoupling by increasing risks of firms being caught in their empty promises and being penalised for that, are likely to lead to a reduction in firms' likelihood of engaging in symbolic commitment/decoupling.

# 3.4.2 Under what conditions are promises more likely to be delivered upon? Factors moderating the relationship between sign up and performance

Building on the emerging discussion on institutional influences on other aspects of corporate social performance (Campbell, 2007, Matten and Moon, 2008, Jeurissen, 2004, Gjolberg, 2009), and a more recent line of study on decoupling (Kim and Lyon, 2012), it is proposed that there are conditions under which symbolic engagement in voluntary CSR initiatives is appealing for firms, and conversely circumstances under which substantive engagement is of more interest. In other words, there are elements that may moderate the relationship between sign up and performance (Knudsen, 2011, Perez-Batres et al., 2012a).

While there is much interest and discussion on drivers for joining voluntary CSR initiatives (Johnstone and Labonne, 2009, Delmas and Montes-Sancho, 2011, Perez-Batres et al., 2010), the literature is incipient in providing explanations for drivers for firm performance in the commitments made (Knudsen, 2011). In addition, where studies exist, they focus on quite different universes, industries, and also vary substantially on their choice of dependant and independent variables, making one cautious about comparing and contrasting them to make conclusions and build one single body of knowledge.

The literature, however, highlights a number of elements that may moderate the relationship between sign up and performance. These can be divided in four groups: what they talk about me matters to my behaviour, where I come from matters to my behaviour, what I do matters to my behaviour and who I am matters to my behaviour.

### 3.4.2.1 What they talk about me matters to my behaviour

Factors proposed to influence firms' CSP after joining a voluntary CSR initiative are proposed to be multilevel, ranging from the firm to its institutional environment at national or global levels (Christmann and Taylor, 2006, Knudsen, 2011, Lim and Tsutsui, 2012). A number of these factors, however, have a common thread of argument, making explicit reference to, or boiling down to, the impact of stakeholder scrutiny and pressure on performance. These stakeholders are varied, ranging from NGOs, governments, employees and others. For one thing, Annandale et al (2004), on a study of 40 multi-sector Australian companies, found that respondents perceived in-firm pressures – i.e.

from parent company or senior management/board – to have an important influence on their environmental performance.

Clients and customers have also been pointed as important stakeholders influencing performance. For one thing, Christmann and Taylor (2006) found that the higher the frequency of customer monitoring, the more likely suppliers are to substantively implement a voluntary CSR standard. Equally, Annandale et al (2004) found that pressure from clients was ranked second in level of importance in regards to their impact on studied firms' environmental performance.

In a similar line but with a broader focus, Knudsen (2011) found that the more internationalised the national economy of a firm's home country the less likely the firm was to be delisted from the UNGC. Likewise, Lim and Tsutsui (2012) showed that a country's bilateral export context is positively and significantly associated with substantive commitment to a voluntary CSR initiative – in other words, firms in short-term, arm's-length economic relations are more likely to use voluntary CSR initiatives to signal good business practices than those in long-term economic relations in the form of foreign direct investment. It has been proposed that short-term business partners are more likely to rely on such initiatives as they have fewer opportunities to collect information on their partners; those on long-term trade relations are generally able to implement broader screening processes (Lim and Tsutsui, 2012).

Non-governmental organisations (NGOs) have an important role in defining and advancing standards and norms related to CSR, either by helping design them, or by exercising voice and mobilising resources to promote these norms (Berrone et al., 2013). As such, NGOs, as well as other social actors such as labour organisations for example, exert strong normative pressures on firms to change the traditional modus operandi and impose more sustainability minded roles and responsibilities for businesses (Perez-Batres et al., 2011, Berrone et al., 2013, Delmas and Montes-Sancho, 2011, Campbell, 2007, Bernhagen et al., 2012). Firms, seeing their legitimacy potentially at peril, will arguably seek to engage with these actors, and ultimately tend to conform to these pressures, in order to protect their legitimacy.

It would be expected, therefore, that stronger presence of counterbalancing voices is likely to be associated with substantive implementation of voluntary CSR standards. Evidence in the literature, however, is mixed. Perez-Bastres et al (2012a), in a study of large publicly traded US firms on stakeholder pressures

as determinants of CSR, found higher stakeholder scrutiny to be positively and significantly associated with firm's choice of substantive engagement in voluntary CSR initiatives. Lim and Tsutsui (2012), however, on a study of participation and performance in the UNGC, found that level of national economic development would moderate this relationship. Focusing on pressure of international NGOs, the authors demonstrated that while in developing countries pressures from international NGOs remained positively and significantly associated with substantial commitment to the initiative, in developed countries those pressures were positively associated with ceremonial commitment to the UNGC (i.e. delisting) (Lim and Tsutsui, 2012).

### 3.4.2.2 Where I come from matters to my behaviour

In a similar line, level of democracy has been pointed as an important factor. More democratic countries normally outperform less democratic peers in a number of welfare areas, including the UNGC issue areas (Bennie et al., 2007). In addition, more democratic countries are more prepared to listen to critical voices in society, including in regards to corporate behaviour (Perkins and Neumayer, 2010, Bernhagen et al., 2012). For one thing, Lim and Tsutsui (2012) found democracy to discourage ceremonial commitment to the UNGC in developed countries and encourage substantive commitment in developing countries.

Other elements of firms' home country's domestic governance have also been pointed in the literature as influencing performance (Knudsen, 2011). Kaufman et al (2009) propose six dimensions of domestic governance, namely: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Together they are proposed to represent the institutional framework through which authority is exercised in a particular country (Kaufmann et al., 2009). It can be argued that strong domestic governance can create the conditions to hold firms' accountable for the commitments they make, therefore leading to substantive implementation of voluntary CSR standards.

In a study of UNGC participants, Knudsen (2011) found evidence that good domestic governance is associated with substantive commitment to the UNGC. Supporting the mirroring argument (Jackson and Apostolakou, 2010), Knudsen (2011) found that good governance in the home country tends to spill over into firms' compliance with commitments made; equally, poor governance was associated with higher levels of delisting from the UNGC.

Still looking into national influence, it has been discussed that a neoliberal orientation in home country is likely to be associated with increased engagement in voluntary CSR initiatives. The latter will present an opportunity to try to reduce regulatory risk, while deflecting criticism and protecting legitimacy by demonstrating engagement in sustainability issues (Lim and Tsutsui, 2012). While this might be a driver for joining, no evidence was found that neoliberal policies might be associated with higher performance. For one thing, Lim and Tsutsui (2012) found neoliberal economic policies to be positively and significantly associated with ceremonial commitment to voluntary CSR initiatives in developed countries. Once again, evidence points to support a mirroring argument (Jackson and Apostolakou, 2010), where lower levels of government intervention are likely to lead to ceremonial commitment to voluntary CSR initiatives.

A last point relates to government's support to the voluntary initiative and impact on performance. A government that is sympathetic to an initiative may, for example, provide firms with incentives to join (Delmas and Montes-Sancho, 2011) and arguably to perform better. Using the launch of the UNGC in a country (represented by launch of a local network) as a proxy for government's support, Lim and Tsutsui (2012) found, however, that in developing countries this endorsement may lead firms that do not have implementation capacity to join the initiative. In developed countries, while UNGC launch increased sign up, there was no evidence that this was associated with improved performance. The authors conclude that UNGC launch only seems to encourage a shallow commitment to the initiative (Lim and Tsutsui, 2012).

### 3.4.2.3 Who I am matters to my behaviour

In regards to firm attributes, studies have pointed size and slack resources to be important influences on performance in voluntary CSR initiative (Knudsen, 2011, Perez-Batres et al., 2012a, Annandale et al., 2004). Authors propose that the larger the firm the more visible are its actions, and the more likely it is to be exposed to greater stakeholder scrutiny and attention (Johnstone and Labonne, 2009, Knudsen, 2011, Schembera, 2012). Therefore, larger firms are likely to be under greater pressure to conform to society's expectations and demands, and therefore more likely to respond to such pressures in order to enhance its legitimacy (DiMaggio and Powell, 1983). For one thing, Knudsen (2011) found that small and medium sized firms were more likely than larger firms to be delisted from the UNGC due to failure to communicate on progress.

Slack resources were found to have an impact in various elements of CSP (Levy and Shatto, 1978, Melnyk et al., 2003, Perez-Batres et al., 2012a, Waddock and Graves, 1997). Financial resources allow firms to engage in new endeavours or routines, as they provide firms with the discretion for decision making that a lack of resources would otherwise prevent (Perez-Batres et al., 2012a, McGuire et al., 1988). In addition to this, implementing new processes arguably requires resources; as a result, an organisation that disposes of slack resources will be better placed to substantively implement the principles or standards they sign up for. As a case in point, Perez-Bastres et al (2012a), in a study of publicly traded large US firms, found that presence of slack resources are positively and statistically significantly associated to firms' choice of substantive CSR.

### 3.4.2.4 What I do matters to my behaviour

Finally, characteristics of the industry the firm belongs to are also proposed to influence their decisions and behaviour. For one thing, belonging to high impact industries has been found to impact performance. Firms in those industries are likely to face higher stakeholder scrutiny and pressure to display alignment with societal expectations (Perez-Batres et al., 2012a, Bansal and Bogner, 2002). Such firms may face real losses if their customers or other stakeholders pull back support for them due to poor (real or perceived) sustainability performance (Bansal and Bogner, 2002). These firms, therefore, find their legitimacy and economic interests to be more at risk, and as a result, would arguably have greater incentives to abide to commitments made.

Some studies found evidence to confirm this proposition. Perez-Bastres et al (2012a) found that firms in pollution intense industries were more likely to choose substantive engagement in voluntary CSR initiatives. Similarly, Knudsen (2011) found that firms in the oil sector were less likely to be delisted from the UNGC – i.e. less likely to display ceremonial commitment to the initiative. Knudsen (2011), however, found that manufacturing firms (another proxy for high-impact industry on her study) had no more or less probability of being delisted when compared to firms in services (proxy for low impact industry). This suggests that this element calls for further exploration.

### 3.4.3 The impact of joining the UNGC on CSP

The debate on whether voluntary CSR initiatives are actually capable of influencing corporate behaviour is an important one and a number of authors have explored this question empirically. Studies, however, point to conflicting and contradictory results, with initiatives being placed anywhere on a continuum

from no impact to significant impact on corporate behaviour (Barla, 2007, Toffel, 2005, King et al., 2005, Chen and Bouvain, 2009, Runhaar and Lafferty, 2009). To some extent, this may be explained by the use of a number of different variables to measure outcomes and performance. Given that most initiatives do not have pre-defined performance indicators, this is not surprising. Scholars need to use the best available data – or the only data available – to measure such outcomes. These may therefore vary greatly depending on the industry the study focuses on, or the geographical region of the study, among other factors. Equally, focus on a specific industry or geographic location may lead to results that cannot be generalised to the initiative or initiatives in general.

In any case, it is clear that results vary greatly. In regards to the ISO14001, studies have found the initiative able to impact behaviour. Toffel (2005), in a study of US manufacturing facilities, found that the ISO14001 has attracted companies with higher environmental performance, and that the certification led to further performance improvements. Similarly, on a study of US facilities, Postoski and Prakash (2005b) found ISO14001 to improve facilities' compliance with government regulations. On another study focusing on US facilities regulated under "major sources" under the US Clean Air Act, the same authors found ISO14001 certification to lead to reduction in pollution emissions, when comparing with non-certified firms (Potoski and Prakash, 2005a).

Conversely, other studies did not found the ISO14001 standard to be effective in leading to improvements in firm performance. Barla (2007), in a study of Quebec's pulp and paper industry, found that while ISO14001 had no impact on reducing the total suspended solid emissions nor the total quantity of rejected process water, it also only had a temporary impact in reducing discharge of biological oxygen demand. In like manner, Aravind and Christmann (2010) found no difference in performance between ISO14001 certified and non-certified firms amongst a sample of US facilities.

The UNGC being the largest CSR initiative in the world (Arevalo et al., 2013), the impact it has on performance has been a major concern of both academics and practitioners. The initiative has often been accused of not "having teeth", i.e. not having the means of ensuring substantive responsible corporate behaviour consistent with the principles participants sign up for. In addition, even though it has a number of integrity measures in place in order to prevent free riding behaviour, such as for example the COP policy, this initiative arguably offers firms significant room for manoeuvre in deciding how to implement the 10

principles. It has been argued that this room for manoeuvre is likely to lead to the development of ceremonial behaviour and symbolic engagement, transforming the initiative into an organisational myth, rather than a tool to achieve improved corporate social performance (Boiral, 2007).

Surprisingly though, only a small number of studies have tackled this question empirically, and often with a limited sample or a measure of performance that did not encompass the full spectrum of UNGC issues. A total of 18 articles were found to address the impact of the UNGC at some level, empirically or not. Within those, the larger group (9 articles) focused on a higher level of analysis, such as impact on sustainable development in general, the UNGC's ability to establish fairer markets, among others (Barkemeyer, 2009, Bremer, 2008, Meyer and Stefanova, 2001, Nason, 2008, Neace, 2007, Smith, 2010). This focus may be related to the fact that the UNGC is part of the United Nations, therefore potentially expected to address global challenges. Two other articles focused on the UNGC's impact on specific issues, namely women inequality (Kilgour, 2007) and the challenges faced by a particular region (Prasad, 2004), while another two looked into the impact of joining for firms (e.g. benefits of being a UNGC participant) (Janney et al., 2009, Cetindamar and Husoy, 2007).

More interestingly, however, five studies were found to focus specifically on UNGC's impact on firm behaviour: two were qualitative case studies of level of UNGC implementation in firms, and three sought to quantitatively verify the UNGC impact on firms' CSP. While they aligned in focus, results found were inconclusive and inconsistent through the articles. Some found the UNGC to have an impact on firm behaviour in regards to some aspect of CSP, whereas others found the initiative was innocuous in influencing corporate action.

In a study of the world's 2000 largest companies, Bernhagen and Mitchell (2010) find that signing up to the UNGC increases the likelihood of firms developing explicit human rights related policies. Chen and Bouvain (2009) also find some positive impact of the UNGC in regards to corporate non-financial reporting. Using a sample of leading companies from US, UK, Australia and Germany, the authors conclude that joining the UNGC has a positive effect in reporting, although limited to issues related to the environment and labour.

Runhaar and Lafferty (2009), however, found less promising results. In a case study of three telecommunication companies the authors found that the UNGC's role in shaping these firms' behaviour in regards to CSP is modest at the best. The authors argue that the principles are seen as minimum standards, not

offering incentives for improved performance. In addition, these companies tend to deal with their industry-specific CSP issues through dedicated networks. On a similar note, Hamman et al's (2009) study of South African listed companies found that being a UNGC participant was not associated with improved corporate performance in regards to human rights. Finally, Baumann and Scherer (2010), in a case study of the implementation of the UNGC in five Swiss companies, also found that these firms are still far from actually embedding the principles into their business routine.

In sum, the literature is far from clear on the ability of the UNGC to shape corporate behaviour in regards to CSP. Results are contradictory and studies are often challenging to compare as they focus on different elements of the initiatives and metrics of CSP. The question remains open academically as to the extent to which the UNGC is able to drive improved performance amongst participants.

## 3.5 A Research Agenda

While valuable knowledge has been shared in the literature on institutional influences on corporate engagement in voluntary CSR initiatives in general and the UNGC in particular, some gaps remain. Two main areas of involvement call for further studies: drivers for joining and drivers for performance. The first part – exploring drivers for joining – brings interesting gaps both in understanding what drives firms to join and also what influences speed of adoption. In regards to drivers for joining the UNGC, studies have mainly focused on national level influences on the decision to join; less attention was dedicated to understanding drivers at other levels. For one thing, the role of corporate social performance in driving the decision to join a voluntary CSR initiative has been found to be mixed - greener firms have been pointed as more likely to join voluntary CSR initiatives in some studies (Bansal and Hunter, 2003), while in other cases firms with poorer performance were found to be attracted to such initiatives (Videras and Alberini, 2000). Questions remain as to what that implies for the UNGC. Equally, the role of mimetic mechanisms and of industry factors in determining firms' decision to join voluntary CSR initiatives could benefit from more discussion. To the author's best knowledge, on the literature on the UNGC, industry level factors have only been explored as a dichotomous variable concerning whether the industry is a high impact one. Questions that could be answered are, for example: to what extent UNGC's penetration in an industry globally might affect subsequent signing up? Similarly, to what extent UNGC penetration in firms' home country might drive firms to sign up to the UNGC?

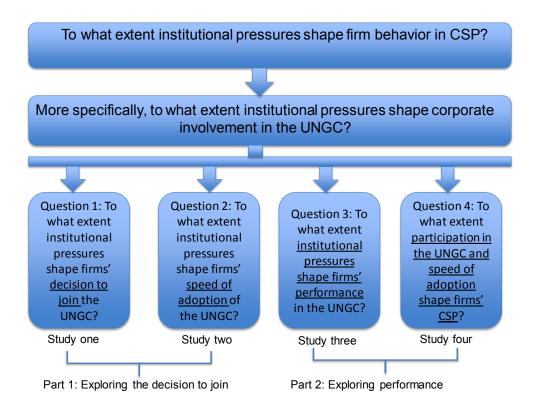
In the sphere of speed of adoption, little has been covered in regards to voluntary CSR initiatives – except maybe for the ISO14001 certification standard; notably, studies on the speed of adoption of the UNGC are extremely scarce (Arevalo et al., 2013). While many parallels can be drawn between ISO14001 and the UNGC, or between certifiable and non-certifiable initiatives, one cannot refrain from arguing that the presence or absence of a certification mechanism, especially in the early stages of diffusion where risk perception is generally greater, may lead to differences on patterns of diffusion and factors that may influence it. To the author's best knowledge, there was only one study on the UNGC that looked into speed of adoption (Arevalo et al., 2013). The study, however, was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption. Questions remain open here at drivers for speed of adoption in the UNGC at a global level, crossing different institutional contexts.

As for part 2 – exploring performance – questions remain both in regards to the influence of the institutional environment on participants' performance and the impact of joining the UNGC in firms' CSP. Despite great interest on firm performance after joining voluntary CSR initiatives and on institutional influences on other aspects of corporate social performance (Campbell, 2007, Matten and Moon, 2008, Jeurissen, 2004, Gjolberg, 2009), the literature on institutional influences on firm performance on voluntary CSR initiatives was found to be incipient (Knudsen, 2011). Articles exploring firms' corporate social performance after joining a voluntary CSR initiative are mainly focused on the impact the initiative itself may have on firm behaviour (Boiral and Henri, 2012, Yin and Schmeidler, 2009). Very few articles have looked beyond the immediate impact of the initiative to understand the extent to which the characteristics of the firm, industry or of its operating environment may influence their performance (Knudsen, 2011, Perez-Batres et al., 2012a). While there seems to be some agreement in regards to the relevance of stakeholder pressure and scrutiny in different guises in improving performance, the small number of studies, different focus, idiosyncratic methods and diverse choice of variables make it challenging to make conclusions and leave questions open in regards to the drivers for performance for firms that decided to participate in these initiatives in general and in the UNGC in particular.

In addition, a lot of attention has been placed on the UNGC's ability to shape corporate behaviour in regards to CSP. The initiative has often been accused of not having the means of ensuring substantive responsible corporate behaviour consistent with the principles participants sign up for. Surprisingly though, only a small number of studies have tackled this question empirically, and often with a limited sample or a measure of performance that did not encompass the full spectrum of UNGC issues. Results found were mixed, with some acknowledging the UNGC impact on firm behaviour, while others positing that the initiative was weak at best in influencing corporate action (Hamann et al., 2009, Baumann and Scherer, 2010, Chen and Bouvain, 2009, Runhaar and Lafferty, 2009). While this discussion remains open, enough evidence exists on the variation on performance across participants, highlighting the importance of further exploring this question. Finally, still in regards to performance, it was often the case that the measures of performance in the UNGC were focused on a single issue, such as human rights (Hamann et al., 2009), or on one aspect of performance (Chen and Bouvain, 2009); a measure of performance encompassing the full spectrum of UNGC issues and principles was not found in the literature.

In response to these shortcomings, the overall objective of this study is to understand the extent to which institutional forces can shape firm involvement in the UNGC. Specifically, this study aims at answering the following questions:

Figure 1: Research agenda



A stronger understanding of the impact of institutional pressures on corporate involvement in voluntary CSR initiatives can arguably represent valuable information in a number of spheres, notably in a context where these aim to play an important role in governing corporate behaviour in a globalised world. This is especially relevant for the UNGC. Being the largest CSR initiative in the world, the UNGC is watched closely by supporters and critics of this model of decentralised institutions through voluntary CSR initiatives. Arguably its success or failure may have an impact on this model as a whole. Therefore, knowledge on aspects that make the initiative more or less effective in attracting firms and getting them to abide to the commitments made, is very valuable for both academics and practitioners.

The next chapter will address the methodological aspects of the thesis covering the epistemology and ontology that guided this research, the methodological choices, an overview of the data, and the limitations of this study. While methodological aspects specific to each empirical study will be covered in the corresponding chapter, chapter three will offer an overview of the methodology used in this thesis.

## 4 Chapter 3: Research Methodology

### 4.1 Introduction

This chapter will cover the overall research strategy of this thesis. In other words it will not cover details of samples or methodology specifics to each empirical chapter - that will be covered within each empirical chapter; it will rather present overarching information about the methods used and key considerations that underpin this work. It will start with a discussion on the epistemology and ontology that guided this research. This will be followed by an explanation of the research strategy and design used and what has been done in previous UNGC studies. A discussion on the data used will follow. Once again that will not cover the specifics of sample for each study, but rather present the key data sources and justify the choice of data, notably for the dependent variables. Finally, a brief discussion on the limitations of this approach will be presented.

### 4.2 Epistemology and Ontology

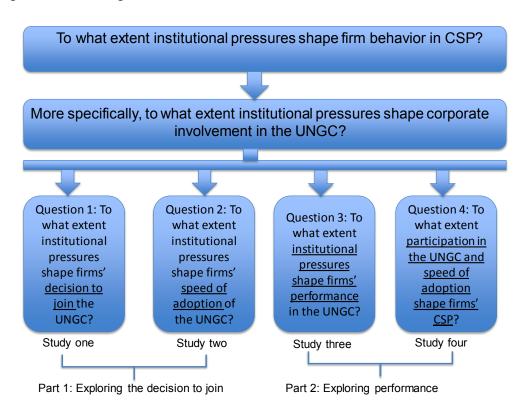
Epistemology refers to "what is (or should be) regarded as acceptable knowledge in a discipline" (Bryman, 2008: 13). There are primarily two main "epistemological paradigms" in research: positivism and interpretivism, which are mainly divided by the discussion on whether the social world can and should be studied following the same approach as the one applied to the natural sciences (Bryman, 2008). Positivism is an epistemological position that supports the application of the methods of the natural science to the study of the social world. Among other aspects, positivism proposes that an objective external reality exists beyond our descriptions of it and that only knowledge that can be confirmed by the senses can be considered knowledge (Bryman, 2008). The position that underlines this study is that corporate social performance is an observable phenomenon, which, despite the challenges and limitations discussed in earlier sections can be measured.

Ontology, on the other hand, refers to whether the social world is external to the actors (objectivism), or if it is something actors are in the process of building and modifying continuously (constructionism) (Bryman, 2008). If understood as a continuum between those two extremes, this thesis is towards the objectivism side, understanding organisations as concrete objects, with its own set of rules, procedures, guides, hierarchy, that exist separate from actors.

## 4.3 Research methodology

The research methodology applied in this thesis is guided by the objective to answer four questions. These focus on the relevance of institutional influences at national, industry and firm levels in driving firms' decision to join the UNGC, in defining speed of adoption, in shaping corporate performance in the UNGC principles and finally the role of the UNGC itself in shaping corporate performance in the commitments firms signed up for. Figure two below represents the research questions. Starting from broader areas of enquiry, it narrows down to show the specific research questions.

Figure 2: Research agenda



In order to answer these questions, this research had to be designed to allow for the study of multi-levels of institutional influence. It also needed to cover a number of different countries, as this is necessary to reflect the nature of the phenomenon studied – the UNGC.

### 4.3.1 Research strategy

There is a key distinction in research strategy, which is of whether is it a quantitative or a qualitative piece. While the latter places emphasis on words, on an inductive approach, views social reality as in constant change as a result of individuals' creation, the former has a special focus on quantification in data

analysis and collection, sees social reality as an objective reality external to the social actor, follows a positivist model and generally uses a deductive approach to establishing the relationship between theory and research, i.e. going from theory, to hypothesis building, data collection, results, review of hypothesis and of theory (Bryman, 2008). This work used a quantitative strategy, and followed a process of deduction, as outlined below:

- 1. Theoretical review: review of different theories explaining drivers for CSP and choice of institutional theory as the one best fit to help building understanding on institutional influences on firm involvement with the UNGC. Development of an overarching conceptual framework, followed by specific theoretical pieces within each empirical chapter, i.e. focusing on each empirical question.
- Hypothesis: Based on the theory, development of specific hypothesis in regards to each of the four empirical questions within each empirical chapter.
- 3. Data collection: Based on the theoretical review and informed by previous empirical work, gathering of secondary data followed both for the dependent and independent variables.
- 4. Findings: Data analysis followed, and relevant findings emerged.
- 5. Hypothesis review: Following the findings, hypothesis were reviewed and either confirmed or rejected.
- 6. Revision of theory: a discussion on to what extent and how findings and theory align or contradict each other closes each empirical chapter and the overall thesis.

Given the stated epistemology and ontology, as well as the need to understand drivers for certain corporate behaviour (involvement with voluntary CSR initiatives) across different countries – therefore by necessity dealing with a large number of observations – a quantitative strategy seemed most appropriate.

### 4.3.2 Research design

This thesis uses a combination of cross-sectional and longitudinal research designs, depending on the research question at hand in each empirical chapter. Cross-sectional research design is defined as focusing in more than one case (generally several) at a single point in time, with the objective of having a body of quantitative data on two or more variables to be used to understand patterns of association (Bryman, 2008). Longitudinal design, on the other hand, considers repeated observations of the same cases overtime (Bryman, 2008),

making it a valuable tool to understand, for example, change in firm's performance.

### 4.3.3 Methods for analysis

Methods for analysis will be explored in more details within each empirical chapter. However, it is important to note that given this thesis' interest in understanding predictors for corporate behaviour related to involvement in voluntary CSR initiatives, it relies on regression as method for analysis. The type of regression used varies across the four empirical studies depending on the dependent variables and specifics of each study.

# 4.3.4 Alignment with previous research on drivers for joining and performance in the UNGC

In addition to being methodologically appropriate to achieve the objectives of this thesis, the choices of strategy, design and methods are largely aligned with the previous research on the UNGC, both in studies exploring decisions on joining and performance. The table below presents a summary of relevant studies:

Table 8: Summary of relevant UNGC studies

Title	Theme	Summary	Sample	Cross- Sectional or Longitudinal	DV	IV	Methods for analysis
(Areval o et al., 2013)	Sign up	Analyses drivers for joining the UNGC, both external institutional forces and internal organisational resources. Economic and image gains are found to be important motivators. While late adopters are found to be more motivated by economic gains than early adopters, both are equally motivated by image gains. They also find that companies with more intangible resources are more motivated by image gains than firms with fewer intangible resources.	Survey of 213 Spanish UNGC participants	Cross- sectional	NA	NA	Independent samples t- tests
(Bennie et al., 2007).	Sign up	Examines drivers for joining the UNGC, assessing company level and political drivers. Examining bivariate relationships, authors find the following to be associated with higher sign up: larger size, being in the extractive industry; being headquarter in a democratic country; higher green party participation in the country, home country's higher UN commitment. Overall (for all analyses), large firms, firms in the extractive industries and country's higher UN commitment are found to be associated with higher UNGC sign up.	Forbes Global 2000 list (firms from 50 countries and 27 industries)	Cross- sectional	DV=UNGC participant Y/N	IV1= Size; IV2=Government involvement-Merger activity; IV3= UN vendor status; IV4=Foreign operations; IV5=Extractive industry Y/N; V6=Democracy at home country; IV7=Green party government participation; IV8=Country commitment to the UN	Bivariate and multivariate logit regression

(Berline r and Prakash , 2010)	Sign up	Drivers for cross-national diffusion of CSR - study of the UNGC case. They find that country embeddedness in IGO networks encourages joining UNGC in a country; embeddedness in INGO networks discourages sign up.	Panel of 89 countries from 2001 to 2007; UNGC participants (firms only, of all sizes)	Longitudinal	DV1= Number of UNGC participants in a country in a given year	IV1=Number of IGOs of which the country is a member; IV2= Number of INGOs that have members in each country	Regression (negative binomial regression)
(Bernha gen et al., 2012)	Sign up	Seeks to explain cross-national variation in UNGC sign up across 145 countries. Finds a democratic regime and participation of organisations other than firms in the UNGC to be associated with higher levels of firm sign up in the UNGC.	UNGC participants across 145 countries in 2009.	Cross- sectional	DV=number of participating firms in each country in 2009	IV1=number of NGOs and labour organisations participating in UNGC per country; IV2=regime type; IV3=green party government participation; IV4=Country's UN Commitment; IV5=Level of local networks activity in the country.	Regression (negative binomial regression)
(Byrd, 2009)	Sign up	Case study of why two public relations companies engaged in the UNGC and how they are integrating the UNGC principles into their work. Finds that these firms have not yet fully integrated the UNGC into their operations. As for drivers for engagement, one agency joined to reaffirm its commitment to the UNGC issues while the other joined due to a personal relation between senior leadership and the UN's Secretary General.	2 public relations companies based in the US	Cross- sectional	NA	NA	Case study

(Perez- Batres et al., 2012a)	Sign up	Looks into drivers (in the form of stakeholder pressures) for firms' engagement in voluntary self-regulatory codes, including the UNGC. Findings suggest that industry ("dirtier" industries more likely to join); discretion/slack resources (more resources, more likelihood to join), higher scrutiny and pressure from some stakeholders are likely to influence firms' decision to join these initiatives.	1,145 large publicly traded US firms that had at least one KLD- score attained between 2001–2005 (total of 3,683 firm-years)	Longitudinal	DV=firms joining the UNGC or the GRI between the years of 2002–2006 = 1 and 0 otherwise.	Calculated from KLD: Community strengths, Corporate Governance strengths, Diversity strengths, Product strengths, Community concerns, corporate governance concerns, Diversity concerns, and Product concerns. IV8=Stakeholder Appraisals (number of KLD reports on a specific firm between 2002–2006); IV9=pollution-intensity (1-3); IV10=slack resources.	Longitudinal logistic regression
(Perez- Batres et al., 2010)	Sign up	Looks at institutional drivers for engagement in the UNGC. Finds that greater European influence (normative pressure) and listing in the NYSE (mimetic pressure) are important drivers for firms to join the UNGC and the GRI.	207 large firms from 6 Latin American countries	Cross- sectional	Participation in UNGC or GRI=1 both=2 None=0	IV1=Total trade with EU as % GDP/ total trade with US as %GDP; IV2=Number of Kyoto Protocol reports submitted by firm's country of origin (1-3); IV3=Listed in NYSE Y/N	Logistic regression
(Perez- Batres et al., 2011)	Sign up	Looks at institutional drivers for engagement in and accountability to the UNGC. They find the following to drive joining: Academic participation in the UNGC (normative) and	394 large corporations from 6 Western European	Cross- sectional	DV1=UNGC Participant Y/N; DV2=Number of COPs	IV1= Country of origin in Western Europe Y/N; IV2= Number of NGO that are UNGC participants in country	Logistic regression (for likelihood of joining) and Negative

		participation in the NYSE (mimetic). Being from a Western Europe country was only relevant when no other factors were accounted for.	countries and 6 Latin American countries		submitted to the UNGC	of origin; IV3=Number of Academic organisations that are UNGC participants in country of origin; IV4= Firm listed in the NYSE Y/N	binomial regression (for level of commitment)
(Perkins and Neuma yer, 2010)	Sign up	Verifies how geography influences early diffusion of voluntary standards including the UNGC. They find higher density in ISO14001 and UNGC in a country's inward and export trade partners to be associated with higher domestic sign up to the respective standard.	ISO 14001 participants (1996- 2000/151 countries) and UNGC participants (2001-2005 / 149 countries).	Longitudinal	DV1=Number ISO14001 certified facilities at national level, normalised by country population; DV2=Number of active UNGC business participants, normalised by country population.	IV1=Trade-Exports from country a to country b; IV2=Inward FDI stock of country b in country a; IV3=GDP per capita; IV4=Democracy	Regression
(Bernha gen and Mitchell, 2010)	Sign up and performance	Analyses drivers for engagement in the UNGC. Finds that firm size, government involvement (UN Vendor), cost of exit (extractive industry) and home country's UN commitment influence firms' decision to join the UNGC. Joining the UNGC has a positive impact on firms' human rights policies as well as on their selection to the Innovest list - UNGC sign up is	Forbes Global 2000 list	Cross- sectional	DV1 = UNGC participant in 2006 (0 or 1) DV2= Reporting (1-COP up to date; 0 if late or inactive) DV3 = Firm has explicit	IV1=firm size; IV2= UN Vendor status; IV3=Merger activity; IV4= Extractive industry; IV5= Strength of environmental demand in a country measured as green parties' vote share at last 2 elections before	Regression

		found to increase the likelihood to make it to the Innovest list by almost 5%.			human rights policy DV4 = Firm profiled in Innovest's Global 100 most sustainable corporations	2006; IV6= home country ratification of Kyoto Protocol and/or the Rome Statute of the Intl Criminal Court; IV7=Outward FDI/GDP; IV8= level of democracy.	
(Cetind amar and Husoy, 2007)	Sign up and performance	Seeks to understand drivers for engagement in environmentally responsible behaviour and the impact such engagement has on corporate performance. Results suggest that firms have multiple reasons of economic and ethical nature to engage in environmentally responsible behaviour. It also suggests that joining the UNGC is relevant to offer network opportunities, improve corporate image and market performance.	29 UNGC participants participated in the survey	Cross- sectional	NA	NA	NA
(Lim and Tsutsui, 2012)	Sign up and performance	Explores why global CSR frameworks (namely UNGC and GRI) have gained prominence and their impact on corporate behaviour. Among other things, finds that NGO pressure leads to ceremonial commitment in developed countries and substantive commitment in developing countries.	99 countries (27 developed, 72 developing) between 2000 and 2007	Longitudinal	DV1=Number UNGC participants in Country; DV2=Number UNGC participants that defaulted COP submission in country; DV3 = Number firms using GRI in	IV1=Number INGOs in country; IV2= Number Ratified treaties by country; IV3=Number UNGC participants in other countries in the region; IV4=Democracy; IV5=Public Sector transparency; IV6=Level of education; IV7= Past UNGC participants in	Multivariate time-series analyses 1) Events history analysis using semiparametr ic Cox proportional hazards model 2) Negative

					country; DV4=Launch of UNGC in country	the country; IV7=UNGC launch in the country; IV8=Bilateral investment context; IV9=Bilateral export context; IV9= National economic system	binominal regression analyse
(Bauma nn and Scherer , 2010)	Performance	Assesses the depth of UNGC principles integration into 5 Swiss companies. Finds that while companies have made the formal commitment to the UNGC and created the preconditions on a commitment level to implement CSR, companies are still far from actually fully embedding the UNGC into their business routines.	5 large Swiss companies	Cross- sectional	NA	NA	Case study
(Chen and Bouvain , 2009)	Performance	Tests leading companies in UK, US, Australia and Germany to assess whether UNGC participant status influences their CSR reporting. Concludes that joining the UNGC influences only some areas of CSR reporting (environmental and workers) and prominence of issues and level of CSR engagement varies across countries.	Largest firms by market capitalisation in leading stock markets in Australia, Germany, UK and US, that provided CSR reports in pdf (34 UNGC participants and 117 not)	Cross- sectional	DV1=Social reporting; DV2=Commun ity reporting; DV3=Environ mental reporting; DV4=Custome rs reporting; DV5=Suppliers reporting; DV6=Workers reporting	IV1=UNGC participant Y/N; IV2=Industry; IV3=Country of origin; IV4=Multi-nationality	MANOVA, ANOVA and Linear regression; content analysis

(Haman n et al., 2009)	Performance	Analyses South African companies' reporting practices, to assess how companies deal with human rights. Participant status in the UNGC is an IV. Focus is not on the UNGC only, but hypothesises that "Members of the UNGC will show greater due diligence on human rights". Used content analysis of annual and sustainability reports of largest 100 companies by market cap listed on JSE stock exchange to assess human rights implementation. UNGC hypothesis was rejected.	100 largest companies in the Johannesburg Stock Exchange (JSE)	Cross- sectional	DV=Score 0-3 on how systematically and rigorously the indicator was reported on (based on reports content analysis)	NA	Content analysis
(Knuds en, 2011)	Performance	Explores the country-level characteristics associated with delisting from the UNGC. For the firm level study, author found that firms from Eastern Europe, East Asia and Africa, as well as small and medium firms have a higher probability of being delisted, however, firms in the oil and gas sector have a lower probability of being delisted. At the national level, the author found that good domestic governance and, to a lesser degree, higher international economic interdependence, are associated with lower levels of delisting in a country.	Firm Level study= 227delisted/1 348 firms universe (UNGC data) National Level Study=630 delisted/ 1701 universe (57 countries)	Cross- sectional	FIRM LEVEL (FL): DV=% Eligible firms which are delisted in country; NATIONAL LEVEL (NL): DV1=Absolute delisting in the country; DV2=Relative delisting;	FL: IV1=Geography NL: IV1=Outward FDI (FDI/GDP); IV2=Trade penetration; IV3=Voice and Accountability; IV4=Political stability/no violence; IV5= Government effectiveness; IV6=Regulatory quality; IV7=Rule of law; IV8=Control of corruption.	FL= Logistic regression NL= Regression

(Runha ar and Lafferty, 2009)	Performance	Analyses the UNGC's capacity to influence corporate behaviour in CSP focusing on the case of 3 telecommunication companies. Concludes that the UNGC is "only one of many initiatives that contribute towards the development and communication of CSR". Argues that the UNGC principles are not sector specific and are seen to reflect minimum norms, therefore not providing incentives for better performance.	3 telecommunic ation companies (Telenor, British Telecom and Deustche Telekom)	Cross- sectional	NA	NA	Case study
(Schem bera, 2012)	Performance	Seeks to understand the impact of joining the UNGC on participants' performance. Finds that level of CSP implementation increases with time since UNGC sign up, however, higher declared UNGC implementation levels are not significantly associated with less UNGC scandals.	UNGC business participants dataset, The RepRisk AG data on UNGC and CSR risks	Cross- sectional	DV=UNGC implementatio n ("Learner" = 1; "Active" = 2; "Advanced" = 3); DV2=UNGC+ implementatio n ("Learner" = 1; "Active" = 2; "Advanced" = 3, "Civil"=4); Dv3=RepRisk index from RepRisk AG	IV=Membership time	Ordinary Least Squares (OLS) regression

It is clear that the research is mostly quantitative, relying often on large samples of firms across different countries. Regression of some type is also predominant (67% of studies) as a method for analysis. Cross-sectional research predominates as a design type (78% of studies) although a few also used a longitudinal approach.

# 4.4 Data

This section will present the dependent and independent variables used in this study. Specific details on sample and building of dependent variables will be provided in each empirical chapter. This section will offer an overview of the variables used, the sources and the some of the challenges encountered in the process of data collection.

# 4.4.1 Dependent variables

The ASSET4 dataset, provided by Thompson Reuters, was used to build the dependent variables in performance and sign up. ASSET4 provides in-depth environmental, social and governance (ESG) data on more than 4,000 global listed companies, including S&P 500, Russell 1000, MSCI Europe, FTSE 250, ASX 300, the MSCI World Index and the 250 MSCI emerging markets companies. With history going back to 2002 on over 1,000 firms, the dataset includes over 750 ESG data points and more than 250 key performance indicators. Trained analysts prepare the ratings using publicly available data about the companies including annual and sustainability reports, NGOs websites, stock exchange filings, various news sources, among others. According to Thompson Reuters, ASSET4 specialises in providing information to professional investors and has a process in place to ensure that every data point goes through a multi-step verification and quality control, including data entry checks, historical comparisons and automated quality rules. This data is divided into four pillars representing performance in economic, environmental, social and governance issues. A summary of the structure of the ASSET4 data is provided below:

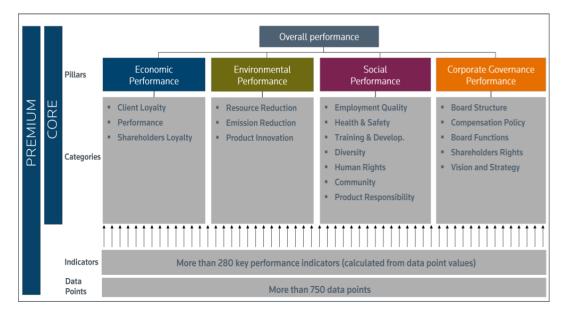


Figure 3: ASSET4 data structure (ThomsonReuters, 2014)

Following the assessment of different datasets, it was clear that ASSET4 offered a valuable source of data for the studies in this thesis. First, it offered a global coverage, with firms from both developed and developing countries. Finding a dataset with this coverage was a major challenge, as a number of the datasets used in the literature cover only developed countries or a single country (for example, the KLD). However challenging, this coverage was necessary to study the UNGC, given the global nature of the initiative. Secondly, it offered a wide range of CSP indicators, covering to a good extent all UNGC issues and principles. This was also an important condition to understand firms' performance in the commitments they have signed up for. Finally, it offered CSP data for most of the time that the UNGC has existed. While the time coverage was not perfect, as it would have been ideal to have data since before the launch of the UNGC, ASSET4 data starts from only two years after the launch of the initiative.

This is not to say that it is not with out limitations. Three issues should be highlighted. First, while both developed and developing countries are represented, the majority of the firms in the dataset are from developed countries. This is arguably a result from the fact that most large listed firms globally are from developed countries and therefore while not desirable it was expected given ASSET4's universe. Secondly, large companies compose the dataset. This arguably does not cover the full spectrum of the UNGC participants, given that small and medium enterprises also participate. However,

comparable and consistent data on small and medium enterprises across different countries are very challenging to obtain and, at the large scale needed for this thesis, to the author's best knowledge, is not available. While this might not be ideal, it is not different from most of UNGC research, as shown on table five. Finally, some level of data inconsistency was found. There was some discrepancy in regards to the data of whether firms were participants or not in a given year, when compared to the data on sign up provided by the UNGC. Although not desirable, the level of discrepancy was not deemed to be high enough to compromise the results. More details are presented in chapter four under dependent variable (section 5.2.2).

ASSET4 data has been used before in the academic literature, for example in a 2012 paper by loannou and Serafeim (2012). In this paper, the authors analyse the role of nation-level institutions in driving firm behaviour in regards to CSP, and use ASSET4's ESG data to measure firms' corporate social performance. More specifically the authors use the environmental and social metrics to build their own composite CSR index (Ioannou and Serafeim, 2012). Roulet and Touboul (2014) also used the ASSET4 dataset in a study of the relationship between economic liberalism at national level and firms' engagement in symbolic and substantive corporate social action.

This thesis used different variables and subsamples of the ASSET4 dataset. More details are provided in each empirical chapter.

#### 4.4.2 Independent variables

Following a revision of the literature and the conceptual development, independent and control variables were selected for each empirical chapter. The table below summarises the variables used, indicating the chapter where they were used. A more detailed description of the variables follows.

Table 9: Summary of independent and control variables

Number	Variable name	Label	Values	Empirical chapter in which it was used
1	Government support to human rights	Government support to the UN's human rights instruments	1 or 0	4, 5
2	Government support to labour	Government support to the UN's labour instruments	1 or 0	4, 5
3	Government support to environment	Government support to the UN's Environment instruments	1 or 0	4, 5

4	Government support to anti-Corruption	Government support to the UN's anti-corruption instruments	1 or 0	4, 5
5	Credit market regulation	Stringency of regulatory environment – credit market regulations	Larger number indicates less stringent regulatory environment	4, 5, 6
6	Labour market regulation	Stringency of regulatory environment – Labour Market Regulation	Larger number indicates less stringent regulatory environment	4, 5, 6
7	Business regulation	Stringency of regulatory environment – Business Regulation	Larger number indicates less stringent regulatory environment	4, 5, 6, 7
8	Voice and Accountability	Governance	-2.5 (weak governance) to +2.5 (strong governance)	6
9	Political Stability and Absence of Violence	Governance	2.5 (weak governance) to +2.5 (strong governance)	6
10	Government Effectiveness	Governance	-2.5 (weak governance) to +2.5 (strong governance)	6
11	Regulatory Quality	Governance	2.5 (weak governance) to +2.5 (strong governance)	6, 7
12	Rule of Law	Governance	-2.5 (weak governance) to +2.5 (strong governance)	6
13	Control of Corruption	Governance	2.5 (weak governance) to +2.5 (strong governance)	6
14	Polity IV	Level of democracy	-10 to +10	4, 5, 6
15	Foreign Direct Investment	Inward FDI investment stock	Any	6
16	DEVELOPEDV SNOT	Level of economic development	1=Developed country, 0=Not	6
17	GRI participation in home country	Number of GRI participants in the country	Any	5
18	UNGC Network	Presence of a UNGC Network	1=yes, 0=No	6

19	Academic Participants	Number of academic UNGC participants in a country	Any	4
20	Local NGOs	Number of local NGOs UNGC participants in a country	Any	4, 5, 6
21	Global NGOs	Number of global NGOs concentration in a country	Any	4, 5, 6
22	Regional Participation	Measure of geographic proximity	Any	4, 5
23	UNGC participants in home country	Measures of UNGC penetration in country	Any	4, 5
24	UNGC participants in the industry	Measures of UNGC penetration in industry	Any	4, 5
25	Peer pressure for performance at country level	Peer pressure for performance at country level	Any	6, 7
26	Peer pressure for performance at industry level	Peer pressure for performance at industry level	Any	6, 7
27	Extractive industry	Firm belongs to the extractive industry (metal mining, coal mining, oil&gas extraction, mining and quarrying of non-metallic minerals)	1=Yes, 0=No	4, 5, 6, 7
28	Firm size	Firm size measured as the log of employees	Any	4, 5, 6, 7
29	ROTA	Slack resources measured as return on assets	Any	4, 5, 6, 7
30	Leverage	Slack resources measured as leverage, which is a ratio of long term debt by assets	Any	4, 5
31	Advertising intensity	Advertisement intensity	Any	4, 5
32	Trade with the EU	Trade ties with Europe	1=Yes, 0=No	4, 5
33	Foreign sales per total sales	Level of firm internationalisation	Any	6
34	Board gender diversity	Board diversity	Any	6
35	SOCSCORE	Corporate Social Performance - Social	0-100	4, 5
36	ENVSCORE	Corporate Social Performance – Environment	0-100	4, 5
37	CGVSCORE	Corporate Social Performance  – Corporate Governance	0-100	4, 5
38	ISO14001 certified	Previous ISO14001 certification	1=Yes, 0=No	5
39	Previous performance	Lag of each dependent variable	Any	6, 7
40	Time of participation in the UNGC	classified as a participant in ASSET4.	Any	6
41	UNGC participant in	Indicates whether firm is a participant in that year	1=Yes, 0=No	7

	current year			
42	Early	Indicates whether a firm is an	1=Yes, 0=No	7
		early joiner or not		
43	Middle	Indicates whether a firm is a	1=Yes, 0=No	7
		middle joiner or not		
44	Late	Indicates whether a firm is a	1=Yes, 0=No	7
		late joiner or not		

(1 to 4) Government's support to the UN reflects whether a country had ratified or otherwise presented the appropriate expression of support to the international agreements/declarations/treaties that underlie the UNGC 10 principles, by the end of 2009. Data for the following international instruments were used: International Covenant of Civil and Political Rights, International Covenant of Economic, Social and Cultural Rights, the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development and the United Nations Convention Against Corruption. This data was obtained from the United Nations' website and is represented by a dummy variable (1 meaning yes and 0 meaning no). In the case of human rights and labour, where more than one international instruments are at the base of the principles, a country only received a "1" if they had demonstrated support for all of them by the end of 2009. The use of this variable is inspired by and builds mainly on the work of Lim and Tsutsui (2012) but of some other authors as well (Bennie et al., 2007, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012).

(5 to 7) Stringency of regulatory environment was operationalised following Berliner and Prakash (2010). It encompasses measures of the stringency of credit market regulations, labour market regulations and business regulations, taken from the Economic Freedom of the World dataset. For these indicators, the larger the number the higher the freedom or the less stringent the regulatory environment is.

The variable for credit market regulations is formed by a combination of the following elements: ownership of banks, private sector credit and interest rate controls / negative real interest rates. A higher rate indicates that the country uses a private banking system to allocate credit to private organisations and refrains from controlling interest rates. Labour market regulations combines hiring regulations and minimum wage, hiring and firing regulations, centralized collective bargaining, working hours regulations, mandated cost of worker dismissal, and conscription. A country that receives a higher rating therefore has more flexible labour laws, leaving market forces to define wages as well as hiring and firing conditions. Finally, business regulations refer to a combination

of administrative requirements, bureaucracy costs, starting a business, extra payments/bribes/favouritism, licensing restrictions and cost of tax compliance. Countries that receive higher ratings here leave markets to define prices and do not display regulatory activities that cause delays to entry into business and increase costs of production (Gwartney et al., 2011).

- (8 to 13) Governance was represented by the World Bank's Worldwide Governance Indicators (WGI). The WGI cover over 200 countries since 1996, and consists of composite indicators in six dimensions of governance, namely: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. Estimate of governance for each dimension ranges from approximately -2.5 (weak governance performance) to +2.5 (strong governance performance). Voice and Accountability represents the extent to which citizens feel they are able to select their government, as well as enjoy freedom of expression and association. Political Stability and Absence of Violence represents the perception of the likelihood that a government will be destabilised by unconstitutional or violent means. Government Effectiveness represents perceptions of the quality of civil service as well as of policy formulation and implementation; it also reflects perceptions of government's commitments to public policies. Regulatory Quality reflects perceptions of the government's ability to define and implement policies that allow for the development of the private sector. Rule of Law reflects the extent to which stakeholders trust and are likely to abide by the rules of society. Finally, Control of Corruption shows perceptions of the extent to which public power is used for private gain.
- (14) Level of democracy was represented by the Polity IV dataset provided by the Centre for Systemic Peace. It follows similar use in other studies (Perkins and Neumayer, 2010, Lim and Tsutsui, 2012, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012). This indicator ranges from +10 (full democracy) to -10 (full autocracy).
- (15) Foreign Direct Investment (FDI) was represented by Inward FDI investment stock, annual, as provided by UNCTAD (United Nations Conference on Trade and Development), Division on Investment and Enterprise.
- (16) Level of economic development was represented by a dummy variables DEVELOPEDVSNOT, which takes a value of 1 if the country is classified as a developed economy and 0 if otherwise. Country classification was obtained from the 2013 World Economic Situation and Prospects (WESP), prepared by the United Nations Department of Economic and Social Affairs (UN/DESA), the

United Nations Conference on Trade and Development (UNCTAD) and the five United Nations regional commissions (Economic Commission for Africa (ECA), Economic Commission for Europe (ECE), Economic Commission for Latin America and the Caribbean (ECLAC), Economic and Social Commission for Asia and the Pacific (ESCAP) and Economic and Social Commission for Western Asia (ESCWA).

- (17) *GRI participation in home country* was calculated by aggregating at country level the ASSET4's data on firm's use of GRI in reporting, using SPSS.
- (18) *UNGC Network Launch* was obtained from the UNGC website and is represented by a dummy variable that takes a value of 1 if a UNGC network was launched in the country in 2010 or before and 0 if otherwise.
- (19) Academic organisations concentration in a country is represented by the cumulative participation of academic organisations in the UNGC in each country per year. This data was calculated using the UNGC dataset.
- (20 and 21) NGOs concentration in a country is represented by the cumulative participation of such organisations (global and local NGOs) in the UNGC in each country per year. These variables were calculated using data from the UNGC dataset and follow similar use in the literature (Bernhagen et al., 2012, Perez-Batres et al., 2011).
- (22) Geographic proximity was also calculated from ASSET4 data and represents the number of UNGC participants in a given geographical sub-region of the world in a particular year, namely: Australia and New Zealand, Central America, Central Asia, Eastern Africa, Eastern Asia, Eastern Europe, Northern Africa, Northern America, Northern Europe, South America, South-Eastern Asia, Southern Africa, Southern Asia, Southern Europe, Western Africa, Western Asia, Western Europe. Country classifications were taken from the United Nations Statistics Division. This builds on Lim and Tsutsui's (2012) use of a similar measure, although these authors used broader geographic areas.
- (23 and 24) Measures of UNGC penetration in country and industry were calculated from ASSET4 data, and reflect the percentage of firms in the sample that were participants in a given industry, or a given country per year, lagged by one year. That follows and builds on Lim and Tsutsui (2012) use of number of participants in the country lagged by one year as an independent variable.
- (25 and 26) *Peer pressure* at country *and industry levels* reflects the average performance of firms in the total sample (i.e. participants and non-participants) for each of the dependent variables, i.e. for each model a different set of

variables was created. It was calculated from ASSET4 data, using SPSS, and lagged by one year.

- (27) A dummy for *extractive industry* was created in SPSS. It gathers firms classified under SIC codes 10 (metal mining), 12 (coal mining), 13 (oil and gas extraction) and 14 (mining and quarrying of non-metallic minerals, except fuels). Authors have found different solutions to represent high impact industries. Bansal and Bogner (2002) focused on mining, forestry and chemicals; Knudsen (2011) focused on oil and manufacturing; Perez-Bastres et al (2012b) developed their own pollution intensiveness ranking; and Bernhagen and Mitchel (2010) looked into oil and gas and materials (these including mining and forestry product companies). Recognising this variety and the lack of a one fully agreed definition of high impact / extractive industry, this study follows EITI (Extractive Industry Transparency Initiative)'s focus on oil, gas and mining companies as firms in the extractive industry (EITI, 2014).
- (28) Firm size was measured as the log of employees, calculated from the variable number of employees provided by Datastream.
- (29 and 30) Slack resources are represented by ROTA (return on total assets) and Leverage (ratio of long term debt by assets). The data was obtained from Datastream.
- (31) Advertising intensity was built as a ratio of advertisement expenditure by sales. The data was obtained from Datastream.
- (32) A large number of articles use measures of trade ties at national level, rather than firm level (Perez-Batres et al., 2010, Neumayer and Perkins, 2004, Delmas and Montiel, 2008, Tambunlertchai et al., 2013). This study measures trade ties with Europe at firm level in order to allow for a more fine-grained analysis of the impact of this relationship in the decision to join the UNGC. One could argue that the fact that a country has trade ties with Europe does not necessarily imply in that all firms in that country will have the same. Therefore, for the purpose of this study a firm level variable seemed to offer a more appropriate measure. This indicator was calculated using Datastream data for home country and trade activities outside of home country. It takes a value of 1 if a firm is not from the EU but has trade activities with it and a value of zero if otherwise (firm from the EU or firm not from the EU but has no trade activities with the EU).

- (33) Level of firm internationalisation was represented by the variable FORSALESTOTALSALES. This is represented by foreign sales as a percentage of total sales, both obtained from Datastream.
- (34) Board gender diversity was obtained from ASSET4 and represents the percentage of women on the board of directors.
- (35 to 37) Three composite measures of performance were used, namely: SOCSCORE (social performance), ENVSCORE (environmental performance) and CVGSCORE (corporate governance performance). This data was obtained from ASSET4. Scores are a number between 0 and 100 that show the firm's performance in comparison to the remaining ASSET4 universe for a particular issue.
- (38) Prior *ISO 14001 certification* was obtained from ASSET4's variable ENERDP073. This is a dummy variable that takes a value of 1 if the firm was ISO14001 certified and 0 if otherwise. The data used was for the year 2009.
- (39) To measure *Previous performance* the dependent variable for each model was lagged by one year.
- (40) Time of participation in the UNGC was measured as the number of years that have passed since the focal firm was first classified as a UNGC participant by ASSET4.
- (41) UNGC participant in current year This variable indicates whether a firm is an UNGC participant in the current year. This data was obtained from ASSET4. It takes a value of one if the firm was a participant in that year, and zero if otherwise.
- (42) Early This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 in 2002 or 2003, and zero if otherwise.
- (43) Middle This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 between 2004 and 2007, and zero if otherwise.
- (44) Late This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 in 2008 of afterwards, and zero if otherwise.

# 4.5 Limitations of methodology used

The main limitations to be highlighted relate to the data. Limitations in regards to data availability have been discussed in more details above, but in a nutshell ASSET4 covers basically large firms, i.e. it does not cover a large part of UNGC participants that are small and medium enterprises. While this is not desirable, in practical terms and to the author's best knowledge there are no alternatives sources covering all types of firms' CSP at this scale. A review of other UNGC studies reflects similar constraints, with most cross-national studies covering mainly large firms.

It should also be highlighted that, even though the ASSET4 dataset covers all UNGC principles to greater or lesser extent, there is not a single widely accepted list of variables to measure performance in the UNGC. In other words, while every effort was made to ensure the choice of performance variables was based on a clear methodology and a solid argument, reflecting performance in every principle, there is some degree of researcher discretion on the choice of variables. In this regard, it would be interesting to replicate the study with other set of variables to see if results would be similar.

# 4.6 Summary and next chapter

This chapter aimed at presenting an overview of key methodological aspects of this thesis. It did not aim at giving a detailed description of the methods used, as this is treated within each empirical chapter. This thesis uses a quantitative strategy, and a combination of cross-sectional and longitudinal designs. It also makes use of a multi-country dataset, and covers multiple levels of institutional influences in corporate behaviour, namely at firm, industry and national levels. These set of methodological choices offered the most appropriate alternative to answer the research questions as it allowed for a cross-national analysis of multi-level institutional influences on firm behaviour in regards to the UNGC, covering a large number of firms, from several countries and industries, over most of the UNGC's lifetime.

The next chapter (chapter four) will address the first empirical question, i.e. to what extent institutional pressures shape firms' decision to join the UNGC. Using a quantitative strategy and a cross-sectional design, it explores the extent to which regulative, normative and cognitive/mimetic pressures shape the decision to join this voluntary CSR initiative.

# 5 Chapter 4: Understanding drivers for the decision to join the UNGC

The literature has theorised about reasons for firms' decision to join voluntary CSR initiatives. As discussed in section 3.2.1, two explanations are prominent: a search for legitimacy or approval from its stakeholders and a search for greater efficiency or performance (Bansal and Bogner, 2002). There is arguably great appreciation from a number of stakeholders for such initiatives, which may confer companies the desired legitimacy following the decision to join. In the case of ISO14001, a number of governments were involved in the design of the certification, therefore arguably being more prone to providing incentives for the adoption of it (Delmas and Montes-Sancho, 2011). However, some stakeholders show concern that firms may use voluntary CSR initiatives to signal commitment without actual behaviour change. In such cases, the initiative's power to confer legitimacy may be at stake. On the efficiency side, the literature remains largely inconclusive about the actual impact of said initiatives on corporate social performance (Bernhagen and Mitchell, 2010, Darnall and Sides, 2008, Arimura et al., 2011, Aravind and Christmann, 2010). While some firms may publicise high savings following the implementation of Environmental Management Systems (EMS) or ISO14001 certification for example, others find the investment not to result on any savings at all (Bansal and Bogner, 2002). Given the uncertain outcomes in both fronts, what still drives firms to join CSR voluntary initiatives?

In addition to uncertain outcomes, the act of joining imposes restrictions on firms' actions. The UNGC, while not having the mandate or the resources to verify actual performance, arguably imposes restrictions on corporate behaviour once firms' commitment to the principles is made public and so are their communications on progress. Other initiatives such as the ISO14001 impose more direct control of firms' actions, through verification and certification. The question is presented again as to what drives firms to choose to join and self-impose limitations to their own actions.

It has been theorised that characteristics of the firm, its industry and its environment may increase pressures and benefits for firms to join voluntary CSR initiatives. As discussed in section 3.2.2, bigger and wealthier firms in highly polluting industries, firms with higher levels of internationalisation, those dealing with a broad network and notably critical voices, those whose peers

have higher levels of adoption, those under stricter regulation or trying to preempt higher levels of regulation, have all been pointed as being more likely to engage in voluntary CSR initiatives (Bansal and Bogner, 2002, Bernhagen and Mitchell, 2010, Delmas and Montes-Sancho, 2011, Campbell, 2007, Johnstone and Labonne, 2009). Evidence on the role of previous performance has been, however, mixed - greener firms have been pointed as more likely to join voluntary CSR initiatives in some studies (Bansal and Hunter, 2003), while in other cases firms with poorer performance were found to be attracted to such initiatives (Videras and Alberini, 2000).

In the case of the UNGC, as reviewed in section 3.2.4, studies have mainly focused on national level influences on the decision to join. Higher level of democracy, green party participation, country commitment to the UN, presence of counterbalancing voices, home country trade ties with Europe and/or with UNGC-oriented trade partners, and liberal economic orientation at home have all been associated with higher likelihood of joining. Less attention was dedicated to understanding drivers at other levels, although being in a high impact industry, as well as being big, being a UN vendor and listed in NYSE have also been pointed as leading to a higher likelihood of joining (Bennie et al., 2007, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012, Lim and Tsutsui, 2012, Perez-Batres et al., 2010, Perez-Batres et al., 2011, Perkins and Neumayer, 2010).

While valuable knowledge exists on the drivers for corporate decision to join voluntary CSR initiatives in general and the UNGC in particular, gaps remain in the literature. For one thing, the role of firms' CSP in driving the decision to join the UNGC is incipient in the literature. Are higher performers more or less likely to join the UNGC? Equally, the role of mimetic mechanisms and industry factors in determining firms' decision to join could benefit from more discussion. To the author's best knowledge, on the UNGC literature, industry level factors have only been explored as a dichotomous variable representing belonging to a high impact industry. Questions that remain are: to what extent UNGC's penetration in an industry globally might affect subsequent signing up? Similarly, to what extent UNGC penetration in firms' home country might drive the decision to join? This study aims at answering these questions and helping build knowledge on the drivers for joining the UNGC, contributing to the flourishing literature on this initiative.

# 5.1 Understanding the decision to join

This section builds on the overarching theoretical framing provided in chapter one, and applies it to the specific questions this chapter aims at answering. The proposed hypothesis are organised around the three pillars or mechanisms of institutions.

Firms' signing up to voluntary CSR initiatives has grown over time (Waddock, 2008). Given their voluntary nature, firms are able to decide whether or not to become a participant. This decision, even though ultimately made by the firm, is not an isolated one, but rather a decision taken within a context. Institutional theory predicts that regulative, normative and cognitive aspects of firms' institutional environment will influence firms' decision to adopt a certain organisational practice (Scott, 2008). Institutions establish what is considered appropriate behaviour through explicit rules and procedures, as well as through principles and norms implicit in daily activities (Bernhagen et al., 2012). Firms will aim to conform (DiMaggio and Powell, 1983) to the dominant practices within their operating environment in order to obtain legitimacy and ultimately ensure its survival in the long run (Scott, 2008). This will lead to increasingly homogenous behaviour, as firms strive to "fit-in" and conform to expectations and requirements.

DiMaggio and Powell (1983) propose that organisations will often be rewarded for being similar to other organisations in their field, even if the isomorphic process does not present clear efficiency benefits for the implementing organisation (DiMaggio and Powell, 1983). This similarity may facilitate interorganisational transactions, ensure that firms fit into eligibility requirements for public and private contracts, help attract professionals and ultimately help firms being acknowledged as legitimate and reputable (DiMaggio and Powell, 1983).

In the case of the UNGC, the number of participating firms has increased from 42 when the initiative was launched in 2000 <sup>11</sup> to over 7,000 business participants in 2013, from more than 145 countries (UNGC, 2013i). The numbers have led to the UNGC being pointed as the foremost CSR initiative in the world (Perkins and Neumayer, 2010), suggesting an important convergence in firm behaviour in regards to joining the Compact.

Whereas indeed the UNGC covers a vast number of firms, there remain companies that decide not to join the UNGC. Even if an institutional perspective

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<sup>11</sup> Source: UNGC dataset

focuses on structure and constraints, one cannot refrain from appreciating that firms subject to similar institutional pressures may choose to respond differently to them (Oliver, 1991). The tension between actors' ability to act and limitations imposed on their action by structural and cultural constraints is an on going discussion in the literature (Scott, 2008).

As discussed in section 2.1.6, Oliver (1991) suggests that conforming is not the only available choice for an organisation faced with institutional pressures and organisations' willingness, capacity and ability to conform will drive their response to the institutional demands. Therefore, despite the UNGC being recognised as the largest CSR initiative in the world (Arevalo et al., 2013), despite the support and engagement from several firms, NGOs, among other stakeholders, there remains variation in sign up across countries, industries and ultimately firms.

## 5.1.1 Regulative / Coercive Mechanism

Following institutional theory and as discussed in section 2.1.3.1, the regulative pillar is based on coercive isomorphism (Scott, 2008, DiMaggio and Powell, 1983). Coercive isomorphism stems from formal and informal pressures applied to organisations by actors upon whom organisations are dependent and theory predicts that the higher the level of dependency the higher the observed level of isomorphism (DiMaggio and Powell, 1983).

The regulative pillar with its coercive mechanisms is often associated with the political system, or the state (Berrone et al., 2013, Delmas and Montes-Sancho, 2011). States may influence organisational behaviour and adoption of practices by providing incentives or implementing sanctions (Delmas and Montes-Sancho, 2011). In the role of customers, states may also exercise coercive force by requiring organisations acting as their contractors or suppliers to adopt certain practices (Delmas and Montes-Sancho, 2011).

Greater acquiescence with regulations, rules and laws can offer the organisation some protection from political risks (in the form of closer monitoring, for example) and legal coercion (in the form of more stringent regulation or enforcement of existing regulations) (Berrone et al., 2013). Delmas and Montes-Sancho (2011) illustrate the argument with the example of the EMAS (Eco-Management Audit Scheme), the first international environmental standard developed by the European Union. While the EMAS was voluntary, the European Commission retained the right to implement compulsory registration in the future. By creating

the threat of new and more stringent regulation, governments may provide incentives for firms to adhere to voluntary standards (Delmas and Montes-Sancho, 2011).

Johnstone and Labonne (2009) also use certification of environmental management systems (EMS) as an example. The authors propose that regulators will see certification of the firm's EMS as a signal of commitment to good environmental performance. Having scarce resources, regulators arguably assume that certified EMS are followed by better environmental performance. Therefore, regulators may choose not to visit certified firms and focus efforts and resources on firms which are perceived as being at higher risk of poor performance (Johnstone and Labonne, 2009, Potoski and Prakash, 2005a). Authors have also highlighted the potential high costs of non-compliance with regulations (Berrone et al., 2013).

Engagement in voluntary CSR initiatives arguably sends a signal to regulators that the focal firm is seeking to improve its CSP, going beyond basic requirements of regulations (Johnstone and Labonne, 2009, Potoski and Prakash, 2005a). Even though the actual results of firm engagement on voluntary CSR initiatives remain uncertain and to some extent controversial, these initiatives are arguably often seen as a positive sign of commitment. Therefore, a public commitment to these initiatives may not only help firms improve legitimacy but also avoid penalties for non-compliance (Berrone et al., 2013) or the bearing of more stringent regulation (Delmas and Montes-Sancho, 2011). A more stringent regulatory environment is therefore arguably going to offer more incentives to increasing firm engagement in voluntary initiatives.

Hypothesis 1: Firms headquartered in countries with a more stringent regulatory environment are more likely to join the UNGC.

Along similar lines, it has been theorised that governments' attitude towards a certain standard or initiative may influence firms' decision to join them (Delmas and Montes-Sancho, 2011). If a government is sympathetic to an initiative or has dedicated resources to support its development, it may, for example, provide firms with incentives to join or threaten non-participants (Delmas and Montes-Sancho, 2011). Delmas and Montes-Sancho (2011) found that government participation in the design of ISO14001 was positively and significantly associated with the number of ISO14001 certifications in a country.

The UN -an intergovernmental organisation – is behind the UNGC and the UNGC's principles are based on international treaties, declarations or agreements of some sort<sup>12</sup>, for which member-states may declare their support. Arguably the UN's sponsorship to the UNGC should increase its credibility in the eyes of governments and other stakeholders and as a result increase its attractiveness to firms (Berliner and Prakash, 2010). Governments however have different agendas and the level of support and appreciation of the UN varies greatly across countries (Bernhagen et al., 2012, Berliner and Prakash, 2010). For example, since the UN's foundation, the United States have been particularly ambivalent in their attitude towards this organisation: while it is the UN's host and main financial contributor, the United States delays signing or ratifying important human rights and environment treaties (Bennie et al., 2007).

As a result, differences in governments' attitudes towards the UN may influence firms' decision to join the UNGC. As noted by Janney, Dess and Forlani (2009) "affiliation with the UNGC in Europe is perceived as less controversial, and more in line with prevalent, commonly-held values, than it would be in the United States". Therefore, following previous studies (Bernhagen et al., 2012) one can argue that the more supportive governments are of the institutions behind the UNGC, the more likely they will be to provide incentives for firms to join, or constrain non-participation, therefore influencing firms' signing up in the country.

Hypothesis 2: Firms headquartered in countries whose government demonstrates greater support to the UN are more likely to join the UNGC.

Home country levels of democracy have also been pointed in the literature as a potential influence on firms' inclination to join voluntary CSR initiatives (Bernhagen and Mitchell, 2010, Bennie et al., 2007, Perkins and Neumayer, 2010, Bernhagen et al., 2012). Governments in countries that display a more democratic political system usually demonstrate concern for and engagement with a wider set of societal interests (Bennie et al., 2007, Perkins and Neumayer, 2010). Equally, more democratic countries normally outperform less democratic peers in a number of welfare areas, including the issue areas of the UNGC – prevention of human rights violations, as well as control of pollution and corruption (Bennie et al., 2007) and are more prepared to listen to critical voices in society, including in regards to corporate behaviour (Perkins and Neumayer, 2010, Bernhagen et al., 2012). Therefore, it is proposed that firms which are

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<sup>&</sup>lt;sup>12</sup> The Universal Declaration of Human Rights, the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, the United Nations Convention Against Corruption.

under the realm of more democratic governments will be under greater pressure (actual or perceived) and therefore have greater incentives to incorporate a larger number of welfare concerns into its daily business, including the proactive joining of voluntary CSR initiatives.

High green party participation in home country has also been pointed as a factor influencing firm inclination to engage in voluntary CSR initiatives (Bernhagen and Mitchell, 2010). In this work this factor is considered covered by level of democracy in firm's home country, given that the argument for the consideration of both variables is very similar – governments that have high green party participation, alike more democratic countries, are more likely to consider and address issues related to sustainability and welfare. Therefore, firms in these countries will be under greater pressure or have higher incentives to address these issues themselves. Despite these arguments, previous studies on the UNGC did not find level of democracy to be significantly associated with increasing levels of signing up (Bernhagen and Mitchell, 2010, Perkins and Neumayer, 2010, Bennie et al., 2007, Lim and Tsutsui, 2012). This requires further analysis and it is therefore proposed that:

Hypothesis 3: Firms headquartered in countries with a more democratic political system are more likely to join the UNGC.

Finally, trade relations have also been pointed as having an important impact on firm behaviour in regards to CSP. While authors have looked into trade relations from a number of different angles and used a wide range of variables to study it, the underlying argument is in many ways similar across the studies. While coercive power is generally associated with the state, firms are also an important source of coercive isomorphism (Delmas and Montes-Sancho, 2011), and this pressure can become evident in trade relations, notably across countries.

As proposed by DiMaggio and Powell (1983: 150) "coercive isomorphism results from both formal and informal pressures exerted on organisations by other organisations upon which they are dependant". One could argue that in a trade relationship there is arguably an imbalance of power, where sellers will seek to ensure contracts with buyers who would have a pool of sellers to choose from. Under those circumstances, firms trading with a country where many local firms have adopted a certain standard may need to adopt that standard as well in order to be able to trade with local firms (Delmas and Montes-Sancho, 2011). These incentives for adoption may be more formal as well, and result from

requirements advanced by buyers for suppliers to adopt standards that are widely implemented in the buyer's country (Perkins and Neumayer, 2010). Delmas and Montes-Sancho (2011) found evidence of this on their study of the diffusion of ISO14001. Perez-Bastres et al (2010) have also found support for this effect in the case of the UNGC, with Latin American firms with stronger trade ties with Europe (as opposed to the US) more likely to join the initiative.

While previous studies on the UNGC have largely used country level trade variables, one can extend this argument to say that firms engaged in trade relations with firms based in more stringent regulatory environments in regards to CSR issues are more likely to be under this sort of pressure to display commitment. The EU is pointed as a "partial exception" to the notion of CSR as voluntary given a number of directives it has put in place to govern sustainability issues, such as for example the Directive for Waste of Electrical and Electronic Equipment which imposes obligations in regards to the collection, recycling and disposal of these materials (Perez-Batres et al., 2011). Therefore, it is hypothesised that:

Hypothesis 4: Firms that have trade ties with Europe are more likely to join the UNGC.

#### 5.1.2 Normative / Normative Mechanism

As discussed in chapter one (section 2.1.3.2), normative systems help define goals and objectives (for example: making a profit) while also defining what constitutes appropriate means to pursue them (for example: sustainable business practices) (Scott, 2008). Normative pressures have been typically associated with professionalisation (DiMaggio and Powell, 1983). According to DiMaggio and Powell (1983) there are two aspects of professionalisation that are important sources of organisational isomorphism. The first rests on the standards set by formal university education, and the second is on professional networks, which cross organisations and through which new models diffuse (DiMaggio and Powell, 1983).

Universities and professional associations are important centres for the definition and dissemination of norms on acceptable organisational and professional behaviour (DiMaggio and Powell, 1983). The result is a pool of individuals with similar mind frames and orientation, occupying similar positions across a number of organisations, and leading to increasing similarities across organisations (DiMaggio and Powell, 1983). Therefore, as proposed by Perez-

Bastres et al (2011:846), "If we wish to talk about the professionalisation of the business world and the legitimacy of the education attained by business leaders, we then need to look at the normative effect of the voices found in academe".

One can observe growing interest from universities and professional knowledge centres on business and sustainability. One example of this is the PRME (Principles for Responsible Management Education). Launched in 2007, it aims at promoting responsible management education (PRME, 2013). In addition, over 700 academic organisations from 85 countries have joined the UNGC as participants (UNGC, 2013g). Arguably these organisations are interested in corporate social performance and are working to incorporate this issue into its professionalisation efforts in their countries. Therefore, the larger the number of academic organisations engaged in such initiatives, the stronger the normative call in a given country for managers and firms to incorporate these issues into their business activities and the more likely it is for these to be considered legitimate practices, preached and embraced by a growing number of organisations. Perez-Bastres et al (2011) found the number of academic organisations that are UNGC participants at home country to be significantly associated with sign up. It is therefore hypothesised that:

Hypothesis 5: Firms headquartered in countries with a large number of academic organisations that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.

Professionalisation is not the only source of normative pressures, though. The community, in the form of non-governmental organisations (NGOs), may also exercise pressure over firms to adopt a certain practice (Delmas and Montes-Sancho, 2011). NGOs have gained prominence over the last decades, and have been an important voice in seeking to define new roles and responsibilities for businesses (Perez-Batres et al., 2011). In line with Perez-Bastres et al (2011) NGOs are classified here as a normative force in shaping firm behaviour in regards to CSP in general, and voluntary CSR initiatives in particular.

In reason with this argument, one can expect that countries with strong NGOs' presence and an environment which allows for them to express themselves (Perkins and Neumayer, 2010), is likely to display strong normative pressures on firms to show higher corporate social performance. In their constant seek for legitimacy firms in this environment will have more incentives to engage in voluntary CSR initiatives. More specifically and in line with the literature (Perez-Batres et al., 2011, Bernhagen et al., 2012), it is hypothesised that:

Hypothesis 6: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.

## 5.1.3 Cognitive / Mimetic Mechanism

As discussed in section 2.1.3.3, the cognitive pillar is based on shared understanding and taken-for-grantedness and isomorphism is achieved through mimetic processes (Scott, 2008). DiMaggio and Powell (1983) highlight that uncertainty is also a powerful force in encouraging organisational behaviour towards isomorphism. When there is uncertainty in the environment organisations may be encouraged to mimic the behaviour of other organisations perceived by them as successful (and therefore legitimate), in order to ensure their own legitimacy (DiMaggio and Powell, 1983, Haunschild and Miner, 1997).

In a study on the use of investment bankers as advisers in acquisition, Haunschild and Miner (1997) found uncertainty to enhance frequency imitation. Following new institutional theory, the authors propose that organisations will tend to mimic actions that have been adopted by a large number of other organisations. The authors theorise that organisations may choose to adopt a practice as the larger the number of adopters the more the legitimacy of such practice is enhanced. As a result, firms seeking legitimacy will aim to adopt legitimate practices (Haunschild and Miner, 1997).

Perez-Bastres et al (2010), in a study of Latin American firms participation in the UNGC, found signing up in the UNGC to have a significant positive relationship with firm listing in the NYSE. The authors contend that Latin American firms listed in the NYSE will see their listed peers as distinguished firms or models to be followed. Therefore, Latin American firms will tend to mimic their behaviour in order to ensure their legitimacy and survive in the long run. Given the high proportion of NYSE listed firms which participate in either the UNGC or the GRI (compared to non listed firms in the US) authors expected – and found evidence of - Latin American firms to imitate this behaviour, given the arguably high acceptance of it among their peer group (Perez-Batres et al., 2010). Lim and Tsutsui (2012), however, did not find previous levels of sign up to the UNGC in the country to significantly influence current levels of sign up at national level.

This mimicking behaviour may also occur in a more unconscious way, through which certain practices or structures that are frequently adopted start to be "taken for granted" and embraced without thinking (Haunschild and Miner, 1997).

Following this line, one can argue that for the case of CSR initiatives, the larger the number of firms that decide to join an initiative, the more the initiative acquires recognition and ultimately legitimacy; therefore, the higher the number of participants the greater the incentive for other firms to join. The more extensive signing up becomes, the more it becomes the "norm" or taken-forgranted behaviour (Haunschild and Miner, 1997). Based on this, it is proposed that:

Hypothesis 7: The higher the number of UNGC participants in the firm's home country, the more likely the firm is to join the UNGC.

It has also been highlighted in the literature that organisations will seek to mimic behaviour of similar organisations in their field that they recognise as more legitimate or successful (DiMaggio and Powell, 1983). Building on this, one can expect the phenomenon above to be even more visible within the same industry. While no studies could be found testing this in the context of the UNGC, it is proposed that:

Hypothesis 8: The higher the number of UNGC participants within an industry globally the more likely a firm in that industry is to join the UNGC.

The cognitive pillar involves elements that influence choice, often without a process of conscious thought (Delmas and Montes-Sancho, 2011, Scott, 2008). It has been theorised that decision makers act under cognitive constraints, therefore searching for solutions within a limited pool of available alternatives, which are recognised as more familiar to them (March and Simon, 1993). Delmas and Montes-Sancho (2011) proposes that firms are likely to constrain their searches for environmental management systems to contexts that are close to them geographically and therefore also culturally. Geographical proximity between people and organisations has been identified in the literature as a relevant element of transmission of innovation and tacit knowledge (Delmas and Montes-Sancho, 2011). A similar hypothesis can arguably be draw in regards to other aspects of CSP, including the decision to join voluntary CSR initiatives. Firms are likely to search for sustainability solutions within contexts that are close to them and that they identify with. Therefore, geographic proximity with countries with a large number of UNGC participants may lead firms in the neighbouring country to join the UNGC. Lim and Tsutsui (2012), however, did not find regional participation in the UNGC to be significantly associated with higher levels of sign up at national level. This calls for further investigation and it is therefore hypothesised that:

Hypothesis 9: The greater the geographical proximity of a firm's headquarter country to other countries with UNGC participants the more likely that firm is to join the UNGC.

# 5.1.4 Different responses to institutional pressures: the role of corporate social performance

While the focus of this study is on institutional pressures and how these may shape firm behaviour, one needs to recognise that not all firms will respond equally to these pressures (Oliver, 1991) and that there are firm level factors that may moderate their response. The impact of firms' corporate social performance on their decision to join voluntary CSR initiatives has not been much explored in the literature. There is an important discussion on the impact of belonging to a high impact industry in firms' decision to join a voluntary CSR initiative (Perez-Batres et al., 2012a, Schembera, 2012) (see section 3.2.2.1). Firms in those industries will generally be under greater scrutiny and pressure from stakeholders to demonstrate alignment with societal goals to protect their legitimacy (Bansal and Bogner, 2002, Perez-Batres et al., 2012a, Schembera, 2012) and therefore have greater incentives to engage in voluntary CSR initiatives to communicate this alignment.

The level of inherent impact and corporate social performance are not, however, exact synonyms, as performance is to great extent associated with how one manages those very impacts. In other words, it is arguably possible, for example, to have an oil company that scores high in corporate social performance and a services firm that scores poorly, even though the latter is likely to have a much lower inherent impact on people and the environment. Nevertheless, one could apply a similar argument as the one above, in that firms with poorer performance are likely to face greater challenges to their legitimacy and therefore would arguably be more likely to join a voluntary CSR initiative to demonstrate willingness to improve social and environmental performance.

The role of good performance in providing incentives for firms to join the UNGC in particular has been surprisingly under discussed. One could argue that a high performing firm may have greater incentives to join an initiative such as the UNGC, as it may offer a platform for the firm to show its credentials, while not requiring much extra investment or resources as the firm is already doing things in most or all the required areas. In other words, by joining the UNGC the firm would be able to enjoy the legitimacy benefits associated with participation without the need for major extra investments. It is therefore hypothesised that:

Hypothesis 10: Firms that display higher corporate social performance are more likely to join the UNGC.

## 5.1.5 Level of economic development as a moderator

Lim and Tsutsui (2012) discuss the role of economic development as a moderator for firm performance in voluntary CSR initiatives. The authors propose that firms in developing countries often adopt global models as a result of mimetic or normative forces, but lack the capacity to implement the commitments made or in some cases are not willing to. Firms in developed countries, on the other hand, while having the power to promote global models, do not necessarily practice what they preach, promoting models they are not willing to commit to, and often using them as a smoke screen when exploiting labour and natural resources in developing countries (Lim and Tsutsui, 2012).

Building on this discussion about performance, one could argue that the level of economic development is also likely to moderate the drivers for firms' decision to join voluntary CSR initiatives in general and the UNGC in particular. In other words, one could argue that it is likely to exist a developing country path for joining and a developed country path for joining. While mimetic forces are expected to have an important impact in defining the developing country path, higher levels of firm internationalisation and belonging to high impact industries are likely to be important determinants of the developed country path.

# 5.1.6 Control variables

#### 5.1.6.1 Firm size

As discussed in section 3.2.2.6, a number of studies found size to be a relevant predictor for firm behaviour in regards to CSP (Bennie et al., 2007, Bernhagen and Mitchell, 2010). Authors have found different explanations for the effect of size, which could be related to any of the three pillars. Despite the variations in focus, the argument is ultimately similar throughout: the larger the organisation, the more visible are its actions and therefore more attention and more scrutiny it is likely to receive from stakeholders (Johnstone and Labonne, 2009, Schembera, 2012). As result of that, larger firms are likely to be under greater pressure to conform to society's expectations and demands, and therefore more likely to respond to such pressures in order to enhance its legitimacy (DiMaggio and Powell, 1983). Building on this argument, it is proposed that larger firms are more likely to join the UNGC.

#### 5.1.6.2 Slack resources

As discussed in section 3.2.2.6, financial resources are arguably essential to allow firms to engage in new endeavours or routines, such as for example join a voluntary CSR initiative (Perez-Batres et al., 2012a, McGuire et al., 1988). They provide firms with the discretion for decision making that a lack of resources would otherwise prevent. In the case of ISO14001 certification, for example, the costs to start up and certify may be very high and eventually prevent some firms with fewer resources from adopting it (Johnstone and Labonne, 2009). In the case of the UNGC, while the financial cost of joining is not particularly high, firms will probably feature into their decision the costs of maintaining membership (preparation of a communication on progress), or an annual voluntary financial contribution to the initiative, for example. Therefore, it is proposed that firms that dispose of more slack resources will be more likely to join the UNGC.

#### 5.1.6.3 Brand value

Firms competing on the grounds of brand image are proposed to be more likely to join voluntary CSR initiatives. It is argued that firms in markets where product differentiation and branding are relevant competing tools would accrue higher benefits from joining initiatives that help signalling to trade partners their commitment and the quality of their actions in the management of these issues (Johnstone and Labonne, 2009). Johnstone and Labonne (2009) found signalling to trade partners to be an important motivator at least for larger firms to adopt and certify their environmental management systems. In the case of the UNGC, while it is not a certification, it arguably has the power to convey a message about the firms' engagement with CSR. Therefore, it is expected that firms competing on those basis will be more likely to join the UNGC.

# 5.1.6.4 Belonging to the extractive industry

A number of studies have discussed the role of belonging to a high impact industry in firms' decision to join a voluntary CSR initiative (Perez-Batres et al., 2012a, Schembera, 2012). Given their inherently high impact on people and the environment, firms in extractive industries will generally be under greater scrutiny and pressure from stakeholders to demonstrate concern with those issues and alignment with societal goals (Bansal and Bogner, 2002, Perez-Batres et al., 2012a, Schembera, 2012). As a result, these firms are likely to find their legitimacy to be more at risk and therefore have greater incentives to engage in voluntary CSR initiatives that can help them signal to stakeholders

their commitment to social and environmental issues. It is therefore expected that firms from extractive industries will be more likely to join the UNGC.

## 5.2 Data

This section provides an overview of the data sources and sample used in this study, as well as an explanation about the dependent and independent variables. This study uses data provided by ASSET4, combined with institutional data provided by a number of publicly available sources (see below and chapter three for a full list and description), as well as some UNGC data on participation and firm level data provided by Datastream.

## **5.2.1** Sample

This study focuses on a subset of the ASSET4 data, more specifically the data for the year 2010. This comprises a total of 4,580 firms, from 59 countries and 70 different industries. A list of the countries in the sample is provided below. The sample comprises firms from developed and developing countries, and different regions of the world. The distribution, however, arguably reflects to some extent the size of national economies, with larger economies often represented with a larger number of firms.

Table 10: List of countries in the sample

GEOGN	Eroguenev
UNITED STATES	Frequency 1213
JAPAN	433
UNITED KINGDOM	406
AUSTRALIA	
	357
CANADA	334
HONG KONG	156
SOUTH AFRICA	131
TAIWAN	129
SOUTH KOREA	106
FRANCE	101
GERMANY	92
BRAZIL	85
CHINA	84
INDIA	83
SWITZERLAND	71
ITALY	59
SPAIN	58
SWEDEN	55
SINGAPORE	54
NETHERLANDS	46
MALAYSIA	45
RUSSIAN FEDERATION	35
BELGIUM	28
DENMARK	27
FINLAND	27
MEXICO	27
POLAND	27
GREECE	25
INDONESIA	25
NORWAY	25
TURKEY	25
THAILAND	23
PHILIPPINES	22
AUSTRIA	21
CHILE	21
IRELAND	18
ISRAEL	14
NEW ZEALAND	12
PORTUGAL	12
EGYPT	11
COLOMBIA	10
LUXEMBOURG	8
SAUDI ARABIA	6
CZECH REPUBLIC	4
HUNGARY	4
KUWAIT	4
ICELAND	3
MOROCCO	3
CHANNEL ISLANDS	2
PERU	2
QATAR	2
UNITED ARAB EMIRATES	2
CYPRUS	1
JORDAN	1
KAZAKHSTAN	1
NIGERIA	1
OMAN	1
SRI LANKA	1
ZIMBABWE	1
Total	4580
ΙυιαΙ	4560

# 5.2.2 Dependent variable

In order to help answer the questions posed in this study, the dependent variable needs to reflect whether a firm is a participant in the UNGC or not in the period studied. Quantitative studies on adoption of voluntary CSR initiatives in general and UNGC in particular have generally taken two approaches – a dependent variable at firm level, or an aggregated measure of sign up at country level. This study focuses on the former. Studies with firm level dependent

variable have largely relied on a dichotomous variable indicating whether the firm is a participant or not in a given year (Bennie et al., 2007, Bernhagen and Mitchell, 2010, King et al., 2005, Melnyk et al., 2003, Perez-Batres et al., 2010, Perez-Batres et al., 2011). This paper adopts similar approach using a binary variable to indicate whether a firm is (1) or is not (0) a UNGC participant in year 2010.

The data on UNGC sign up was obtained from ASSET4, and further triangulated with a dataset obtained from the UNGC covering the period since its inception until 2010, and with the UNGC website. While the bulk of the data was accurate, approximately 1% of firms marked as non-participants in 2010 by ASSET4 should actually be considered participants (i.e. according to the UNGC dataset and website they were participants in 2010). Firms were considered participants if they had joined anytime until the end of 2010. In addition, there were four firms that were marked as participants but should be marked as non-participants. Therefore, the final number of UNGC participants in the sample was 582 (out of the 4580 observations).

# 5.2.3 Independent Variables

The independent variables used in this study were gathered from a number of publicly available sources and are listed and explained below (and in chapter three, under section 4.4.2.).

## 5.2.3.1 Regulative / Coercive

Stringency of regulatory environment was operationalized following Berliner and Prakash (2010). It encompasses measures of the stringency of credit market regulations, labour market regulations and business regulations, taken from the Economic Freedom of the World dataset. For these indicators, the larger the number the higher the freedom or the less stringent the regulatory environment.

The variable for credit market regulations is formed by a combination of the following elements: ownership of banks, private sector credit and interest rate controls / negative real interest rates. A higher rate indicates that the country uses a private banking system to allocate credit to private organisations and refrains from controlling interest rates. Labour market regulations combines hiring regulations and minimum wage, hiring and firing regulations, centralized collective bargaining, working hours regulations, mandated cost of worker dismissal, and conscription. A country that receives a higher rating therefore has more flexible labour laws, leaving market forces to define wages as well as

hiring and firing conditions. Finally, business regulations refer to a combination of administrative requirements, bureaucracy costs, starting a business, extra payments/bribes/favouritism, licensing restrictions and cost of tax compliance. Countries that receive higher ratings here leave markets to define prices and do not display regulatory activities that cause delays to entry into business and increase costs of production (Gwartney et al., 2011).

Government's support to the UN reflects whether a country had ratified or otherwise presented the appropriate expression of support to the international agreements/declarations/treaties that underlie the UNGC 10 principles, by the end of 2009. Data for the following international instruments were used: International Covenant of Civil and Political Rights, International Covenant of Economic, Social and Cultural Rights, the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development and the United Nations Convention Against Corruption. This data was obtained from the United Nations' website and is represented by a dummy variable (1 meaning yes and 0 meaning no). In the case of human rights and labour, where more than one international instruments are at the base of the principles, a country only received a "1" if they had demonstrated support for all of them by the end of 2009. The use of this variable is inspired by and builds mainly on the work of Lim and Tsutsui (2012) but of some other authors as well (Bennie et al., 2007, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012).

In line with a number of previous studies, *level of democracy* was represented by the Polity IV dataset provided by the Centre for Systemic Peace (Perkins and Neumayer, 2010, Lim and Tsutsui, 2012, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012). This indicator ranges from +10 (full democracy) to -10 (full autocracy).

A large number of articles use measures of trade ties at national level, rather than firm level (Perez-Batres et al., 2010, Neumayer and Perkins, 2004, Delmas and Montiel, 2008, Tambunlertchai et al., 2013). This study measures *trade ties with Europe* at firm level in order to allow for a more fine-grained analysis of the impact of this relationship in the decision to join the UNGC. One could argue that the fact that a country has trade ties with Europe does not necessarily imply in that all firms in that country will have the same. Therefore, for the purpose of this study a firm level variable seemed to offer a more appropriate measure. This indicator was calculated using Datastream data for home country and trade

activities outside of home country. It takes a value of 1 if a firm is not from the EU but has trade activities with it and a value of zero if otherwise (firm from the EU or firm not from the EU but has no trade activities with the EU).

#### 5.2.3.2 Normative

NGOs and Academic organisations interested in CSP is represented by the cumulative participation of such organisations in the UNGC in each country as of 2009. These variables were calculated using data from the UNGC dataset and follow similar use in the literature (Bernhagen et al., 2012, Perez-Batres et al., 2011).

#### 5.2.3.3 Cognitive / Mimetic

Measures of UNGC penetration in country and industry were calculated from ASSET4 and reflect the percentage of firms in the sample that were UNGC participants in a given industry, or a given country in 2009. That follows and builds on Lim and Tsutsui (2012) use of number of participants in the country lagged by one year as an independent variable.

Geographic proximity was also calculated from ASSET4 and represents the number of UNGC participants in a given geographical sub-region of the world in 2009, namely: Australia and New Zealand, Central America, Central Asia, Eastern Africa, Eastern Asia, Eastern Europe, Northern Africa, Northern America, Northern Europe, South America, South-Eastern Asia, Southern Africa, Southern Asia, Southern Europe, Western Africa, Western Asia, Western Europe. Country classifications were taken from the United Nations Statistics Division. This builds on Lim and Tsutsui (2012) use of a similar measure, although these authors used broader geographic areas.

# 5.2.3.4 Firm Attributes and industry

Corporate Social Performance was measured using the following variables from ASSET4: CVGSCORE (corporate governance), SOCSCORE (social) and ENVSCORE (environment), all for 2009. Scores are a number between 0 and 100 that show the firm's performance in comparison to the remaining ASSET4 universe for a particular issue.

*Firm size* was measured as the log of employees in 2009, calculated from the variable number of employees provided by Datastream.

Slack resources are represented by ROTA (return on total assets) and Leverage (which is built from a ratio of long term debt by assets). This data was obtained from Datastream for the year 2009.

Advertising intensity was built as advertisement expenditure as a percentage of total sales, for the year 2009. The data was obtained from Datastream.

A dummy for *extractive industry* was also created in SPSS. It gathers firms classified under SIC codes 10 (metal mining), 12 (coal mining), 13 (oil and gas extraction) and 14 (mining and quarrying of non-metallic minerals, except fuels). Authors have found different solutions to represent high impact industries. Bansal and Bogner (2002) focused on mining, forestry and chemicals; Knudsen (2011) focused on oil and manufacturing; Perez-Bastres et al (2012b) developed their own pollution intensiveness ranking; and Bernhagen and Mitchel (2010) looked into oil and gas and materials (these including mining and forestry product companies). Recognising this variety and the lack of a one fully agreed definition of high impact / extractive industry, this study follows EITI (Extractive Industry Transparency Initiative)'s focus on oil, gas and mining companies as firms in the extractive industry (EITI, 2014).

# 5.2.3.5 National level variables: how different are the national contexts in the sample?

A number of the independent variables are measured at the national level, such as for example, the level of democracy or the stringency of labour market regulation. The table below helps one understand the extent to which variation can be observed across these different national contexts. The level of variation is stronger in some variables than others, for example, while stringency of business regulation has a mean of 6.58 and a standard deviation of 0.68, level of democracy represented by Polity IV has a mean of 8.52 and a standard deviation of 4.187.

Table 11: Descriptive statistics for the national level independent variables

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Credit market regulation	4570	4	10	8.01	1.279
Labour market regulation	4570	4	9	7.73	1.528
Business regulation	4570	4	8	6.58	0.68
Polity IV	4575	-10	10	8.52	4.187
Government support to human rights	4578	0	1	0.6	0.49
Government support to labour	4578	0	1	0.31	0.462
Government support to environment	4578	0	1	0.97	0.167
Government support to anti-corruption	4578	0	1	0.84	0.37
Academic participants	4580	0	67	25.48	25.937
Global NGOs	4580	0	21	7.514	8.6325
Local NGOs	4580	0	65	24.092	25.7059
UNGC participants in home country	4575	0	1	0.1356	0.15115
Regional UNGC participation	4580	0	122	61.6172	35.62051
Valid N (listwise)	4567				·

# 5.3 Methods

Given that the outcome variable is a categorical variable (participant or non-participant) and the predictor variables are both continuous and categorical, the method used for data analysis was binary logistic regression (Field, 2009).

# 5.4 Results

Figure four presents descriptive statistics and Pearson correlation coefficients for the variables of this study. It can be observed that UNGC participant status in 2010 is significantly correlated to most variables, except for the variable representing country support to The Rio Declaration on Environment and Development, for the ones representing slack resources and advertisement intensity. Differently from expected however, participant status is negatively correlated to the number of NGOs and academic participants in the UNGC, as well as to country support to the United Nations Convention Against Corruption and to belonging to an extractive industry (both at the 0.01% level). Finally, the variable for credit market regulations was positively correlated to participant status, implying that more flexible credit market legislation is correlated to higher sign up. The remaining relationships were according to expectations.

Figure 4: Descriptive statistics and Pearson correlation coefficients

Variables	Mean	Std. Deviatio N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1 PARTICIPANT2010	0.1271	0.33309 4580	1																								
2 Firm size	8.8241	1.82042 3728	.264**	1																							
3 Leverage	18.985	18.21263 4299	0.013	-0	1																						
4 ROTA	3.7933	31.10044 4242	0.009	.067**	0.007	1																					
5 Advertising intensity	1.0746	33.50389 4542	-0	-0	-0.02	-0	1																				
6 Extractive industry	0.1135	0.31728 4580	054**	304**	113**	094**	-0.01	1																			
7 Trade with the EU	0.1122	0.47158 4580	.033*	.198**	059**	0.016	0 -	065**	1																		
8 SOCSCORE	50.055	30.74459 3882	.448**	.465**	.039*	.040*	.046**	133**	.088**	1																	
9 ENVSCORE	49.743	31.79824 3882	.398**	.444**	.049**	0.016	.044** -	170**	.113**	.808**	1																
10 CGVSCORE	52.281	30.1953 3882	.068**	.058**	.132**	0.006	-0.03	.109**	.077**	.311**	.232**	1															
11 Academic Participants	25.48	25.937 4580	116**	.050**	.140**	0.015	-0.01		.219**		087**	.488**	1														
12 Local NGOs	24.092	25.7059 4580	109**	.047**	.140**	0.024	-0.01	095**	.192**	036*	094**	.458**	.976**	1													
13 Global NGOs	7.514	8.6325 4580	150**	.045**	.131**	0.024	-0.01	111**	.179**	041*	081**	.500**	.950**	.948**	1												
14 UNGC participants in home country	0.1356	0.15115 4575	.407**	.121**	.048**	0.016	0.004	132**	219**	.333**	.314**	108**	250**	233**	317**	1											
15 UNGC participants in the industry	0.1399	0.0729 4580	.175**	.189**	-0.03	.046**	0.005	187**	.065**	.218**	.216**	049**	044**	030*	052**	.115**	1										
16 Regional UNGC participation	61.617	35.62051 4580		.098**	0.011	0.01	0.014	172**		.174**	.263**		071**			.409**	.031*	1									
17 Credit market regulation	8.01				112**	045**	-0	.198**	038**	068**	-0.01	209**	647**		747**	.113**	-0.02 -		1								
18 Labour market regulation	7.73	1.528 4570		061**	.056**	038*	0.01	.079**	.197**	183**	145**	.418**	.485**	.419**				061**		1							
19 Business regulation	6.58	0.68 4570			0.009	-0.02	-0.01	.069**	.051**		084**	.351**	.180**	.080**						508**	1						
20 Polity IV	8.52	4.187 4575				040**		.049**		.122**	.149**		.279**					0.017		072**		1					
21 Government support to human rights	0.6	0.49 4578		086**	-0.02		0.012	.142**	276**	.173**		188**					0.023					272**	1				
22 Government support to labour	0.31	0.462 4578	.235**	.042*	0.026	.033*	-0.01	078**	330**	.313**	.245**		322**										418**	1			
23 Government support to environment	0.97	0.167 4578		0.005	.053**	036*		0.004			050**	-0.02	.149**	.141**										256**	1		
24 Government support to anti-Corruption	0.84			123**	.033*			.125**		098**			.317**					249**							076**	1	
25 UNGC participants in home country and industry	0.1356	0.23676 4346	.558**	.183**	0.01	0.014	-0.01	059**	091**	.357**	.326**	0.001	169**	161**	208**	.631**	.288**	.281** .	075**:	358**	184** .	062** .:	290** .:	373**	-0.011	141**	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

While most correlation coefficients conform to the norms, correlation coefficients amongst UNGC participants other than firms (i.e. Academic organisations, Local NGOs and Global NGOs participation in the UNGC) present a concern for multicollinearity, as the coefficient is greater than 0.8 (Field, 2009). A similar case was observed for the relationship between the variables representing social performance and environmental performance. Given the potential multicollinearity concern, further tests were run to check the Variance Inflation Factors (VIF). Using linear regression in SPSS, the table below was prepared:

Table 12: Variance inflation factors (VIF)

	Collinearity	Statistics
Variables	Tolerance	VIF
(Constant)		
Firm Size	0.623	1.605
Leverage	0.935	1.07
ROTA	0.963	1.038
Advertising intensity	0.954	1.048
Extractive Industry	0.822	1.216
Trade with the EU	0.788	1.268
SOCSCORE	0.283	3.533
ENVSCORE	0.309	3.235
CGVSCORE	0.371	2.695
Academic Participants	0.027	37.341
Local NGOs	0.02	50.088
Global NGOs	0.02	49.296
UNGC participants in home country	0.232	4.306
UNGC participants in the industry	0.834	1.199
Regional UNGC participation	0.338	2.963
Credit market regulation	0.165	6.046
Labour market regulation	0.268	3.728
Business regulation	0.257	3.885
Polity IV	0.384	2.603
Government support to human rights	0.128	7.812
Government support to labour	0.237	4.225
Government support to environment	0.535	1.869
Government support to anti-Corruption	0.423	2.363
UNGC participants in home country and industry	0.532	1.878
a Dependent Variable: PARTICIPANT2010		

Although there is not a clearly established threshold of when a value of VIF should become a concern, this study follows Field (2009) in that values above 10 signal potential problems of multicollinearity. Table nine shows that social and environmental performance do not seem to present a concern here; however, variables representing academic, local and global NGO participation in the UNGC all have VIFs above 10. Equally, these three variables have tolerance statistics below 0.1 suggesting serious problems of multicollinearity (Field, 2009). In order to prevent the unwanted effects of multicollinearity, models were run separately with each of these variables. Academic participation was retained as it offered a better contribution to the explanatory power of the model.

The results of the logistic regressions are presented in the table below. The dependent variable in all models is PARTICIPANT2010, which takes a value of 1 if the firm was a participant in 2010 or 0 if otherwise. Different models are presented below, each with a different block of independent variables following the theory on the previous sections.

Table 13: Regression table for models one to eleven

Independent variables	M1 -6.882	-6.565	M3 -6.799	-6.831	M5 -6.783	M6 -8.897	-7.616	-8.214	M9 -7.445	M10 -13.813	M11 -5.547
Constant	(0.351)	(0.805)	(0.361)	(0.366)	(0.36)	(0.429)	(0.371)	(0.856) ***	(1.01)	(3.294)	(2.505)
Firm Size	0.544 (0.035) ***	0.588 (0.04) ***	0.576 (0.036) ***	0.581 (0.036) ***	0.568 (0.036) ***	0.548 (0.039) ***	0.532 (0.035) ***	0.569 (0.042) ***	0.253 (0.047) ***	0.299 (0.057) ***	0.172 (0.095) *
ROTA	-0.003 (0.005)	-0.005 (0.006)	-0.001 (0.005)	0.001 (0.005)	0 (0.005)	-0.001 (0.006)	0.001 (0.005)	-0.002 (0.007)	-0.005 (0.008)	-0.015 (0.009)	-0.006 (0.012)
Leverage	0.002 (0.003)	0.005 (0.003)	0.008 (0.003) ***	0.008 (0.003) ***	0.007 (0.003) **	-0.001 (0.003)	0.003 (0.003)	0.001 (0.003)	-0.002 (0.004)	-0.004 (0.005)	0.009 (0.009)
Advertising intensity	-0.001 (0.004)	0 (0.002)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.004)	0 (0.003)	0.007 (0.024)	-0.002 (0.026)	0.093 (0.063)
Extractive Industry	0.301 (0.207)	0.33 (0.229)	0.297 (0.212)	0.284 (0.212)	0.291 (0.21)	0.854 (0.235) ***	0.412 (0.21) *	0.752 (0.244) ***	0.607 (0.261) **	0.781 (0.32) **	0.449 (0.497)
Trade with the EU		0.509 (0.123) ***						0.602 (0.128) ***	0.429 (0.141) ***	0.345 (0.166) **	0.223 (0.33)
Credit market regulation		0.086 (0.062)						-0.064 (0.074)	-0.028 (0.083)	0.062 (0.101)	0.099 (0.319)
Labour market regulation		-0.292 (0.046) ***						-0.124 (0.052) **	-0.133 (0.061) **	0.001 (0.116)	-0.152 (0.166)
Business regulation		-0.139 (0.11)						0.039 (0.123)	-0.098 (0.141)	0.074 (0.246)	-0.293 (0.352)
Polity IV		0.011 (0.02)						-0.004 (0.025)	-0.061 (0.028) **	0.263 (0.245)	-0.14 (0.055) **
Government support to human rights		1.449 (0.227) ***						1.369 (0.323) ***	0.973 (0.359) ***	-0.463 (0.587)	2.205 (0.786) ***
Government support to labour		0.654 (0.155) ***						-0.078 (0.186)	-0.242 (0.222)	-0.043 (0.323)	0.701 (0.743)
Government support to environment		-0.049 (0.421)						-0.704 (0.503)	-0.306 (0.561)		-0.396 (1.158)
Government support to anti-Corruptio	n	0.116 (0.142)						0.359 (0.162) **	0.134 (0.189)	0.282 (0.251)	-0.097 (0.71)
Academic Participants			-0.022 (0.002) ***					-0.003 (0.006)	-0.005 (0.007)	-0.023 (0.01) **	-0.045 (0.042)
Global NGOs				-0.086 (0.007) ***							
Local NGOs					-0.02 (0.002) ***						
UNGC participants in home country						6.108 (0.31) ***		4.628 (0.472) ***	4.276 (0.548) ***	5.499 (0.814) ***	5.835 (2.828) **
UNGC participants in the industry						5.302 (0.78) ***		5.051 (0.789) ***	4.797 (0.924) ***	5.939 (1.115) ***	1.172 (1.501)
SOCSCORE									0.04 (0.005) ***	0.047 (0.006) ***	0.027 (0.008) ***
ENVSCORE									0.01 (0.004) **	0.011 (0.005) **	0.013 (0.008) *
CGVSCORE									0.008 (0.003) **	0.004 (0.004)	0.013 (0.007) **
Regional UNGC participation							0.011 (0.002) ***				
N	3651	3647	3651	3651	3651	3651	3651	3647	3309	2552	745
Nagelkerke R Square Percentage correct cases	0.139 2.4	0.33 26.8	0.188 5	0.216 7.7	0.183 5.9	0.36 31.7	0.163 6.3	0.394 34.7	0.517 49.3	0.555 53.7	0.453 47.9
Difference in Nagelkerke R Square	2.7	0.19	0.05	0.08	0.04	0.22	0.02	0.26	0.4	0.4	0.3
relative to first model		0.19	0.00	0.00	0.04	0.22	0.02	0.20	0.4	0.4	0.5

# Model 1: Being big, wealthy and a big name

Model 1 is the base model and the most parsimonious one, including only variables for size, slack resources, belonging to an extractive industry and advertising intensity. The data shows that larger firms are more likely to join the UNGC. For every unit of increase in size, the odds of a firm deciding to join the

UNGC goes up by 1.72 (p<0.01). The remaining variables were not significant in this model.

The model explained only 13.9% of the variance in sign up (Nagelkerke R<sup>2</sup>). In addition, while it correctly classified 85.1% of the cases, it was only able to correctly classify 2.4% of the firms that decided to join (PARTICIPANT2010=1).

# Model 2: The role of regulatory mechanisms

Model 2 includes additional theoretically relevant variables to account for the institutional environment of the firm. More specifically, it brings in the role of coercive / regulatory mechanisms in influencing the odds of firms deciding to join the UNGC. Model 2 offers an improvement in explanatory power compared to model 1 explaining 33% of the variation (Nagelkerke R<sup>2</sup>). It also was able to correct classify 26.8% of the firms that decided to join (PARTICIPANT2010=1).

Firm size remains positive and significant, increasing the odds of a firm joining the UNGC by 1.80 for every unit of increase in size (p<0.01). Country commitment to the UN represented as country support to the Human Rights covenants was the variable with the greatest impact, increasing by 4.26 times the odds of sign up for firms in countries that supported it (p<0.01). Country support to The International Labour Organization's Declaration on Fundamental Principles and Rights at Work was also positive and significant, increasing the odds of a firm joining by 1.92 (p<0.01). The other two variables for government support to the UN were not significant.

Foreign trade with the EU was also positive and significantly related to sign up, with firms engaged in these relationships 1.66 times (p<0.01) more likely to join. In regards to regulation, only labour was negative and significant (p<0.01), suggesting that more stringent labour regulation in a country increases the odds of a firm joining the UNGC. Out of the three elements that are proxies for regulation this is the most closely related to social issues (labour) as the other two are linked to credit market regulations and business regulations (such as bureaucracy costs, licensing restrictions, incidence of corruption, among other factors). It is therefore not very surprising that this is the element with the greatest influence on firms' decision to join.

### Model 3: The role of normative mechanisms - Academia

Model 3 builds on model 1, and adds to it the variable representing the participation of academic organisations on the UNGC in a country. Model 3

offers a slight improvement from model 1, but its explanatory power is not as good as model 2. Model 3 explains 18.8% of the variance (Nagelkerke R<sup>2</sup>). In addition, while it correctly classified 84.9% of the cases, it was able to correctly classify 5% of the firms that decided to join (PARTICIPANT2010=1).

Firm size remains positive and significant and increasing the odds of a firm joining by 1.78 (p<0.01). Leverage is positive and significant, i.e. different from expected more leveraged firms have slightly increased odds of joining (Exp(B)=1.008). More interestingly and also different from expected, participation of academic organisations in the UNGC seems to discourage firms from joining the UNGC. For every extra academic participant, a firm is 0.98 times less likely to join (Exp(B)=0.0978, p<0.01). While this is a small reduction and this number is very near 1 (which would indicate no change on the odds of the dependant variable being 1), it is important to highlight it.

# Model 4 and 5: The role of normative mechanisms – Local and Global NGOs

Running the models with the variables representing NGO participation (local and global) rather than academic participation yields similar results. Due to the high concern of multicollinearity between these three variables they cannot be in the model at the same time therefore separate models were run. In both cases, firm size was positive and significant increasing the odds of a firm joining by approximately 1.8 (p<0.01). Leverage was also positive and significant, i.e. different from expected more leveraged firms have slightly increased odds of joining.

Participation of NGOs in the UNGC – a proxy for the presence of NGOs concerned with corporate social responsibility in a country - was negative and significant both for local and global NGOs. Participation of local NGOs decreased the odds of a firm joining the UNGC by 0.98 (p<0.01). For Global NGOs this number was 0.92 (p<0.01). As in the case of academic participants this number represents a small reduction in odds and a Exp(B) very near 1.

The model including global NGOs explained 21.6% of the variance (Nagelkerke  $R^2$ ) and correctly classified 7.7% of firms that became participants. The model including local NGOs, on the other hand, explained 18.3% of the variance (Nagelkerke  $R^2$ ) and correctly classified 5.9% of the UNGC participants in the sample.

# Model 6: Mimetic mechanisms – Peer sign up within country and industry

Model 6 builds on model 1 adding to it the variables representing mimetic mechanisms. Out of the variables representing the three of Scott's pillars, mimetic mechanisms have the greatest influence on the odds of a firm joining the UNGC. For every unit of increase on the percentage of UNGC participants within a given industry globally, a firm in this industry is 200.67 times more likely to join (p<0.01). Country participation has an even stronger effect, as for every unit of increase on the percentage of UNGC participants in a given country within the sample, a firm is 449.53 times more likely to join the UNGC (p<0.01). Firm size remains positive and significant, and so is belonging to an extractive industry in this model. The latter increases the odds of a firm joining the initiative by 2.35 (p<0.01). Model 6 explains 36% of the variance (Nagelkerke R²), adding 22.1% to the explanatory power of the base model. In addition, the model correctly classifies 31.7% of the UNGC participants in the sample, which is an important improvement when compared to model 1.

# Model 7: Mimetic mechanisms – Peer regional sign up

Model 7 uses regional levels of participation as a measure of mimetic forces. A model including the three measures of mimetic mechanisms (regional sign up to the UNGC and UNGC sign up within country and industry) concomitantly resulted in regional participation being negative and not significant. The same was observed when a model was run with these three measures and all the other institutional measures. Even though the correlation and VIF checks did not indicate a multicollinearity problem, it is possible that a more subtle case of multicollinearity is occurring.

This model is poorer than model 6, explaining only 16.3% of variance (Nagelkerke  $R^2$ ). It also only correctly classified 6.3% of participants. Regional participation is, however, positive and significant (p<0.01). For every unit of increase on the number of participants within a geographical region, the odds of a firm joining the initiative goes up by 1.01 (p<0.01).

# Model 8: A full institutional picture

Model 8 builds on the previous models using all variables representing the institutional pressures together. It brings in concomitantly the role of regulative/coercive, normative and cognitive/mimetic mechanisms in shaping firms' decision to join the UNGC. Model 8 represents an important improvement

compared to model 1, although it does not change much compared to model 6. Model 8 explains 39.4% of the variation (Nagelkerke R<sup>2</sup>) and correctly classifies 34.7% of the UNGC participants in the sample.

Mimetic mechanisms remain a key element with variables for peer sign up to the UNGC within country (Exp(B)=102.28, p<0.01) or industry (Exp(B)=156.24, p<0.01) displaying the higher impact on the odds of firms joining the initiative. In regards to the regulatory pillar, country support to the UN in regards to the Human Rights and Corruption covenants, more stringent labour regulation and trade relations with the EU are all linked to an increase in odds of firms joining the UNGC as well. The normative variable (participation of academic organisations in the UNGC) is negative but no longer significant. It is important to highlight that the model was subsequently run using the variable for Local NGO participation in the UNGC and then for Global NGO participation, but these were not significant either and offered a slightly poorer contribution to the explanatory power of the model. Therefore, the model presented here retained the variable for academic participation in the UNGC as a proxy for normative mechanisms. Firm size and belonging to an extractive industry remained positive and significant, increasing the odds of a firm joining by 1.77 (p<0.01) and 2.12 (p<0.01) respectively.

# Model 9: Adding another layer of complexity – the role of corporate social performance

Model 9 builds on model 8 adding the variables for social, environmental and governance performance. It offers an important improvement from model 8, explaining 51.7% of the variation in sign up (Nagelkerke R²) and correctly classifying 49.3% of the firms that decided to join the UNGC. The model shows that higher corporate social performance has an important role in influencing the odds of a firm joining the UNGC, as all these variables were positive and significant. Out of the three (social, environmental and governance performance), social performance has the strongest influence increasing the odds of a firm joining by 1.04 (Exp(B)=1.04, p<0.01) for every unit of increase in performance.

Mimetic mechanisms remain a fundamental element in influencing sign up, increasing the odds of joining the UNGC by 71.98 (p<0.01) for every unit of increase in joining within country and by 121.17 (p<0.01) for every unit of increase in joining within an industry globally. From a regulatory/coercive point of view, country support to the UN's Human Rights covenants, a more stringent

labour regulation and trade relations with the EU all remain positive and significant. Level of democracy, on the other hand, becomes negative and significant (p<0.05), differently from expected. Finally, firm size and belonging to an extractive industry remain positive and significant.

# Model 10: Developed countries only

Model 10 starts from model 9 but uses a sub-sample of developed countries only. It explains 55.5% of the variation in sign up (Nagelkerke R<sup>2</sup>), a small improvement from model 9. In addition, it correctly classifies 53.7% of the firms that decided to join the UNGC. Firm size remains positive and significant, as well as belonging to an extractive industry. In regards to the regulatory environment, however, only trade ties with the EU remain significant (p<0.05) and positive, increasing the odds of a firm joining by 1.41 (Exp(B)). Differently from expected academic participation is significantly associated with a drop in the odds of firms joining the initiative (Exp(B)=0.98, p<0.05). Peer participation in country and industry are positive and significant, increasing the odds of a firm in a developed country joining the UNGC by 244.5 and 379.64 times respectively (p<0.01). In regards to corporate social performance, however, corporate governance performance is no longer significant. Social and environmental performances remain positive and significant (p<0.01 and p<0.05), increasing the odds of a firm in a developed country to join the UNGC by 1.05 and 1.01.

# Model 11: Developing countries only

Model 11 starts from model 9 but uses a selection of developing countries only. It explains 45.3% of the variation in sign up (Nagelkerke R<sup>2</sup>), therefore presenting a poorer explanation power if compared to model 9. In addition, it correctly classifies 47.9% of the firms that decided to join the UNGC among the selected cases. Interestingly, the model presents a better fit to firms in developed countries than firms in developing countries.

Level of democracy was negative and significant, suggesting that differently from expected higher levels of democracy decrease the odds of firms joining the initiative (Exp(B)=0.87, p<0.05). Home country support to the UN's Human Rights covenants, however, was positive and significant (p<0.01) as expected, increasing the odds of joining by 9.07. Peer participation within country remained positive and significant and by far the variable with the greatest impact, increasing the odds of joining by 342.01 times (p<0.05). Peer participation within

industry at a global level, however, was no longer significant. Finally, in regards to corporate social performance, environmental performance is no longer significant. Social and governance performance remain positive and significant (p<0.01 and p<0.05), increasing the odds of a firm in a developed country to join the UNGC by 1.03 and 1.01.

# 5.5 Discussing the hypotheses

A summary of the hypothesis is presented on the table below. For the full sample (i.e. developed and developing countries together) hypothesis 1 is only partially supported. While more stringent labour regulation was associated with increasing odds of sign up in model 9, the other measures of regulation were not significant. Hypothesis 2 can only be partially supported as well. When variables representing country support to the UN treaties/declarations that underlie the four issue areas of the UNGC are included, only country support to the Human Rights covenants is significant (and positive), therefore offering some support to hypothesis 2. Hypothesis 3 is not supported. Level of democracy was significant in model 9 but it had a negative coefficient, which goes against what the hypothesis proposed. Hypothesis 4 refers to firms' trade ties with Europe. The variable representing this relationship is positive and significant in model 9 and so this hypothesis is supported.

Table 14: Discussing the hypotheses

Hypotheses	Status for full sample
Hypothesis 1: Firms headquartered in countries with a more stringent regulatory environment are more likely to join the UNGC.	Partially supported
Hypothesis 2: Firms headquartered in countries whose government demonstrates greater support to the UN are more likely to join the UNGC.	Partially supported
Hypothesis 3: Firms headquartered in countries with a more democratic political system are more likely to join the UNGC.	Not supported
Hypothesis 4: Firms that have trade ties with Europe are more likely to join the UNGC.	Supported
Hypothesis 5: Firms headquartered in countries with a large number of academic organisations that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.	Not supported
Hypothesis 6: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.	Not supported
Hypothesis 7: The higher the number of UNGC participants in the firm's home country, the more likely the firm is to join the UNGC.	Supported
Hypothesis 8: The higher the number of UNGC participants within an industry globally the more likely a firm in that industry is to join the UNGC.	Supported
Hypothesis 9: The greater the geographical proximity of a firm's headquarter country to other countries with UNGC participants the	Partially supported

more likely that firm is to join the UNGC.	
Hypothesis 10: Firms that display higher corporate social performance are more likely to join the UNGC.	Supported

Academic participation in the UNGC was not significant in model 9. Whenever academic participation in the UNGC was significant it had a negative coefficient, therefore hypothesis 5 is not supported. The same can be said of NGO participation in the UNGC, therefore hypothesis 6 is also not supported.

Hypothesis 7 and 8 are supported, as peer participation within country and industry is positive and significant in model 9. Hypothesis 9 refers to the influence of geographical proximity. While this variable was positive and significant when used on its own in model 7 (i.e. without the other measures of mimetic pressures), it was not significant if substituting the other mimetic variables in model 9, therefore this hypothesis is only partially supported. Variables for corporate social performance, on the other hand, are positive and significant, therefore supporting hypothesis 10.

If, however, models are run separately for subsamples including only developed or only developing countries, a slightly different picture emerges. For developed countries, in regards to regulatory mechanisms, only trade ties are positive and significant, therefore supporting hypothesis 4, but not confirming hypotheses 1, 2 and 3. Hypothesis 5 is not confirmed either, as although academic participation is significant it has a negative coefficient. Hypothesis 7 and 8 are confirmed though, as variables for peer participation in country and industry are positive and significant. If the model is run with regional participation in substitution of the other two measures of mimetic pressures this variable is not significant, therefore hypothesis 9 cannot be confirmed. Finally, hypothesis 10 is partially supported as only social and environment performance scores are positive and significant.

For developing countries, the only regulatory hypothesis that is partially confirmed is hypothesis 2, as the variable representing country support to the Human Rights covenants is positive and significant. Hypothesis 1, 3 and 4 are not confirmed. Hypothesis 5 is not confirmed either, as academic participation is not significant. Hypothesis 7 is confirmed as average UNGC sign up within country is positive and significant, but hypothesis 8 is not as the variable for peer participation within industry is no longer significant. If the model is run with regional participation in substitution of the other two measures of mimetic

pressures this variable is not significant, therefore hypothesis 9 cannot be confirmed. Finally, hypothesis 10 is partially supported as only social and governance performance scores are positive and significant.

Table 15: Discussing the hypothesis - developed vs. developing countries

Hypothesis	Status developed countries	Status developing countries
Hypothesis 1: Firms headquartered in countries with a more stringent regulatory environment are more likely to join the UNGC.	Not supported	Not supported
Hypothesis 2: Firms headquartered in countries whose government demonstrates greater support to the UN are more likely to join the UNGC.	Not supported	Partially supported
Hypothesis 3: Firms headquartered in countries with a more democratic political system are more likely to join the UNGC.	Not supported	Not supported
Hypothesis 4: Firms that have trade ties with Europe are more likely to join the UNGC.	Supported	Not supported
Hypothesis 5: Firms headquartered in countries with a large number of academic organisations that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.	Not supported	Not supported
Hypothesis 6: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. UNGC participants) are more likely to join the UNGC.	Not supported	Not supported
Hypothesis 7: The higher the number of UNGC participants in the firm's home country, the more likely the firm is to join the UNGC.	Supported	Supported
Hypothesis 8: The higher the number of UNGC participants within an industry globally the more likely a firm in that industry is to join the UNGC.	Supported	Not supported
Hypothesis 9: The greater the geographical proximity of a firm's headquarter country to other countries with UNGC participants the more likely that firm is to join the UNGC.	Not supported	Not supported
Hypothesis 10: Firms that display higher corporate social performance are more likely to join the UNGC.	Partially supported	Partially supported

# 5.6 Discussion and conclusion

This chapter aimed at understanding the factors that may influence firms' decision to join the UNGC. Focusing on the three pillars of institutions the chapter explored whether regulatory, normative and cognitive/mimetic mechanisms may influence firms' signing up to the UNGC. The study combined national, industry and firm level factors in order to allow for a more robust understanding of what drives this decision. Together these combined levels account for 51.7% of variance in sign up in the initiative amongst the firms in the sample, correctly classifying 49.3% of participants.

Not all pillars, however, had the same level of influence over firms' decision to join. Regulatory influence was patchy. More stringent regulation at home country

was not observed to increase the likelihood of joining in every case. While more stringent labour regulation was seen to increase the odds of sign up, credit market and business regulations did not influence it. Out of the three elements that are proxies for regulation, however, it is not very surprising that this is the element with the greatest influence on firms' decision to join, as this is the most closely related to social issues. The other two variables are linked to issues such as bureaucracy costs, licensing restrictions, among other factors and as a result are arguably overall more distantly related to CSP. If firms are trying to avoid more stringent regulation or improve legitimacy in the eyes of regulators, it arguably makes sense to engage in an initiative that is able to convey this message of proactive action in the area of work where they are trying to show performance. If comparing the UNGC issue areas and these three areas of regulation, labour is indeed the most obvious area of overlap in regards to corporate social performance.

Country support to the UN was also not confirmed to influence signing up for all four issue areas of the UNGC, as most of them proved to be non-significant. Country support to the Human Rights covenants, however, was positive and significant for all the models where it was included.

Regulative pressures associated with economic incentives, on the other hand, were positive and significant throughout. Firms that had trade relations with Europe and were headquartered in other parts of the world had increased odds of joining the initiative. Given the global nature and applicability of the UNGC, it is not surprising that it may be used in trade relations to reduce the information asymmetry between partners or to impose some control or direction on supply chain management of corporate social performance issues.

Surprisingly, however, normative forces were in most cases not relevant, and where significant they had a negative impact in firms' likelihood of joining. This was not expected, as both NGOs and academic organisations are understood as an important normative force in shaping firm behaviour in regards to corporate social performance. Berliner and Prakash (2010), however, found that the presence of international NGOs in a country was associated with lower levels of UNGC sign up due to criticism of these organisations towards some aspects of the UNGC. This may be an element at play here as well, although the NGOs in this case are UNGC participants and therefore even if not fully agreeing with every aspect of the initiative, have demonstrated at least willingness to engage with it. It may be that higher levels of signing up of critical

voices at a local level may discourage some firms to join due to fear of exposing their weaknesses or engaging in a closer dialogue when they might not be fully prepared for it – for example if they are still at a learner level in the UNGC. It may be as well that this may discourage signing up of firms inclined to ceremonial engagement with the UNGC, as this may lead to closer scrutiny and pressure to achieve a level of implementation that they are not ready to commit to.

Mimetic forces, on the other hand, have a key role in influencing firms' decision to join. Both the participation of peers within the firm's home country and within the firm's industry at a global level had a major impact in increasing the odds of a firm joining the initiative. This may signal that the UNGC's initiative to promote the establishment of local networks is a good strategy to increase the number of participants, as those networks may offer a good space to promote and display local participation.

The role of good corporate social performance in firms' decision to join the UNGC has been largely unexplored in the literature. This study shows empirical evidence that higher performers will be more likely to join the UNGC. This is especially true for a high performer in social issues (compared to environment and governance). It is proposed that these firms can achieve quick benefits from joining, as they may obtain the legitimacy benefits associated with participation without having to incur in much more investments to abide for the commitments made as they already are high performers. It is important to highlight that these performance variables represent a relative measure of performance, i.e. they measure firm performance as compared to peers in the sample. This implies that this interpretation should be made with some degree of caution, as being better than peers does not necessarily imply being a very high performer if peers are poor. However, given the variables that feed into this score and distribution, one can still expect that for a firm to be high in this scale it is highly likely to be implementing a number of actions that are in consonance with the UNGC principles and requirements.

The study also showed that larger firms are more likely to join the UNGC. As proposed, the larger the organisation, the more visible are its actions and therefore more attention and scrutiny they are likely to receive from stakeholders, putting them under greater pressure to conform to society's expectations to protect their legitimacy. Larger firms active at a global level may be even more

inclined to engage in a voluntary CSR initiative such as the UNGC given its global reach and capacity to convey its message internationally.

Finally, slack resources are not conclusively contributing to increasing or decreasing the odds of joining. It might be that firms do not see a clear immediate cost of joining (as it is the case with a certification, for example, that has a high initial cost) and therefore this may not be a major factor influencing their decision. Advertisement intensity was not significant throughout. This goes against a common critique of the UNGC, which says that it is mainly large brands that join the UNGC to use the UN's legitimacy power to empower their brand in the eyes of stakeholders. Belonging to the extractive industry, on the other hand, did contribute to increase the odds of joining in many models, supporting to some extent the argument that firms in higher impact industries will see their legitimacy most at risk and therefore have greater incentives to join the UNGC in order to show alignment with societal interests and protect their legitimacy.

It is interesting to highlight, however, how the factors influencing the decision to join varied when the level of economic development of countries acted as a moderator. As expected, the developed country path for signing up was marked by membership of extractive industry and economic incentives related to foreign trade. Strong mimetic pressures, also as expected, marked the developing country path for joining. It was surprising, however, that while mimetic forces derived from peer participation within home country were relevant for developing country firms, mimetic forces at industry level were not significant (they were only significant for developed country firms). As this is a measure of mimetic forces within an industry at a global level, it may be that firms in developing countries are not as well connected globally when compared to peers in developed countries, and therefore are less exposed to such pressures.

Normative forces in the form of academic participation in the UNGC were not relevant for firms in developing countries, but were seen to discourage signing up in developed countries. It may be that developed countries offer the space for these organisations to be effectively more vocal in their criticism of corporate behaviour, causing firms to some extent to shy away from sharing with these counterbalancing voices the space of dialogue that the UNGC can provide. This may specially be true for firms inclined to a ceremonial commitment to the initiative.

Firm's performance in social issues influenced firms in both developed and developing countries to join. Finally, regulatory pressures at country level were only relevant for developing country firms. Firms that were in countries that had displayed support for the human rights covenants were mode likely to join. Surprisingly, however, firms in less democratic developing countries were more likely to join.

# 5.7 Relevance for practitioners and for the theory

This study makes an important contribution to theory by bringing in the role of corporate social performance as a driver for firms' decision to join voluntary CSR initiatives in general and the UNGC in particular. While this discussion is incipient in the literature on voluntary CSR standards in general and the UNGC in particular, the impact of those variables is indeed relevant in driving firms' decision to join.

For practitioners seeking to promote voluntary CSR initiatives, empirical evidence that firms that have higher CSP are more likely to join the UNGC is relevant information. Practitioners can arguably work with those firms in order to gather enough support to attract more firms to the initiative. Following from that, empirical evidence of the important impact of peer participation in firms' decision to join the initiative is also valuable information for practitioners. It suggests that the establishment of partnerships with industry organisations, for example, can be a good tool to increase sign up. Initiatives at the country level such as the UNGC local networks are an equally important tool, as those networks may offer a good space for local participants to be seen and a good display of local participation for firms that have not decided to join yet.

# 5.8 Summary and next chapter

This chapter aimed at understanding the factors that may influence firms' decision to join the UNGC. Focusing on the three pillars of institutions the chapter explored whether regulatory, normative and cognitive/mimetic mechanisms may influence firms' signing up to the UNGC. The study also combined not only national but also industry and firm level factors in order to allow for a more robust understanding of what drives this decision.

Results show that larger firms, who are high corporate social performers and to some extent that belong to an extractive industry are more likely to join. Equally, firms from countries that support the UN human rights covenants and have more stringent labour regulation are more likely to become participants. More

important, however, mimetic mechanisms seem to play a major role, with firms being nearly 72 times more likely to join for every unit of increase on the percentage of UNGC participants from the same country, and nearly 122 times for likely to join for every unit of increase on the percentage of UNGC participants within its industry globally.

Interestingly, however, different paths for joining seem to emerge for developing and developed countries, with the results varying for those two groups of countries. While the developed country path for joining was marked by firm size, membership of extractive industry and economic incentives related to foreign trade, lower levels of democracy and country support for human rights covenants marked the developing country path for joining. Strong mimetic pressures, as expected, also marked the developing country path for joining. Mimetic pressures were also relevant, however, for developed countries, reinforcing the importance of this factor. Previous social performance in social issues was relevant in driving firm sign up in both groups.

The next chapter will build on this one, offering a more nuanced understanding of the decision to join the UNGC, focusing not only on the overall decision to sign up but also more specifically on what drives firms' speed of adoption. It is notorious that firms join in different stages of the initiative, with the UNGC having expanded its base of participants from just above 40 on the first year to several thousands as of today. Understanding to what extent institutional pressures drive firms' decision to join at early or late stages of the UNGC is the focus of chapter five.

# 6 Chapter 5: Understanding speed of adoption of the UNGC

Participation in the UNGC has grown over the last decades. When the initiative was launched in 2000, 42 firms from 14 countries joined<sup>13</sup>. As of 2013, the UNGC had over 7,000 business participants spread across over 145 countries<sup>14</sup>. This growth suggests that the pace and pattern of adoption varies across firms. Those numbers leave one with questions – Considering that even a considerable time after their launch benefits associated with adoption of voluntary CSR initiatives are still under debate, what influences these organisations to early adopt in a time when risks and uncertainty are much higher? Equally, what factors may drive the decision to join – or not – at later stages, when participation in these initiatives becomes more widespread? This chapter will explore these questions.

As discussed in chapter two (section 3.2.3), the diffusion of new practices is proposed to happen as a contagious process: through interactions in a network, firms collect evidence of the value of a practice; once they have reached its evidentiary threshold, the firm decides to adopt said new practice (Albuquerque et al., 2007). The amount of evidence requested for a decision to be made, as well as the time it takes to gather it, will vary across firms (Albuquerque et al., 2007). Factors influencing firm decision to become early adopters of a new practice are proposed to be multi-level. They may be related to firm attributes, to industry characteristics or to features of the firm's operating environment. For example, bigger firms, with more resources and previous good performance, were more likely to be early joiners of ISO14001 (King and Lenox, 2001, Bansal and Hunter, 2003). These firm level factors may see their predicting power reduce overtime, however, once the practice or initiative at hand becomes more institutionalised (Tolbert and Zucker, 1983). Drivers beyond organisations' boundaries are therefore also relevant. For one thing, coercive or regulatory forces in the form of government can be very efficient in promoting sign up notably in the early phases (Delmas and Montes-Sancho, 2011), by providing rewards and penalties for adoption and showing potential adopters the benefits of the innovation.

<sup>&</sup>lt;sup>13</sup> Source: UNGC dataset

<sup>14</sup> http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html

As discussed in section 3.2.3.1, motivations to adopt have also been proposed to influence speed of adoption. Early adopters, i.e. those that adopt a practice in the early stages of the institutionalisation process, are proposed to do so in views of achieving improved performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008). As the institutionalisation of a practice progresses, the decision to adopt it becomes more of a requirement than a choice, as normative and cultural pressures reach a point where non-adopters risk to be seen as deviants from the norm (Scott, 2008, DiMaggio and Powell, 1983). In other words, adopting the new practice becomes more a matter of ensuring legitimacy following a logic of appropriateness, than achieving efficiency, following a sense of instrumentality (Scott, 2008, DiMaggio and Powell, 1983). This two-stages approach, as proposed by Tolbert and Zucker (1983) has been widely discussed in the literature.

While the literature on innovation and diffusion has covered a diverse pool of phenomena, little has been covered in regards to voluntary CSR initiatives – except maybe for the ISO14001 certification standard; notably, studies on the speed of adoption of the UNGC are extremely scarce (Arevalo et al., 2013). While many parallels can be drawn between ISO14001 and the UNGC, or between certifiable and non-certifiable initiatives, one cannot refrain from arguing that the presence or absence of a certification mechanism, especially in the early stages of diffusion where risk perception is generally greater, may lead to differences on patterns of diffusion and factors that may influence it. To the author's best knowledge, there was only one study on the UNGC that looked into speed of adoption (Arevalo et al., 2013). The study, however, was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption.

Help building knowledge in this area with a cross-national, multi-industry study can therefore make a relevant contribution to the literature on the diffusion of voluntary CSR initiatives in general and on the UNGC in particular. In addition, understanding the patterns of adoption of voluntary initiatives, as well as the relevance of different drivers in each stage of adoption can offer valuable knowledge to those aiming at increasing corporate engagement in such initiatives. Therefore, this study aims at answering the following questions in the context of the UNGC: Considering that even a considerable time after their launch benefits associated with adoption of voluntary CSR initiatives are still found to be questionable, what influences organisations to early adopt the UNGC in a time when risks and uncertainty are much higher? Equally, what

factors may drive the decision to join at later stages, when participation becomes more widespread?

# 6.1 Understanding speed of adoption: a theoretical framework

Despite the fact that the UNGC has existed for a number of years now, levels of sign up have continued to increased over time, suggesting that the pace and pattern of adoption varies across firms. Institutional theory predicts that regulative, normative and cognitive aspects of firms' institutional environment will influence firms' decision to adopt a certain organisational practice (Scott, 2008). Institutions establish what is considered appropriate behaviour through explicit rules and procedures, as well as through principles and norms implicit in daily activities (Bernhagen et al., 2012). Firms will aim to conform to the dominant practices within their operating environment in order to obtain legitimacy and ultimately ensure its survival in the long run (Scott, 2008). This process of isomorphism will lead to increasingly homogenous behaviour (DiMaggio and Powell, 1983), as firms strive to "fit-in" and conform to expectations and requirements.

Firms' responses to those pressures though may vary, as may the speed with which firms decide to conform to dominant practices. Organisations' willingness, capacity and ability to conform will drive their response to the institutional demands, and responses may range from acquiesce, to compromise, avoidance, defiance and manipulation (Oliver, 1991). Equally, and more relevant for this work, the speed with which firms respond to such pressures may also vary, and such variation may be influenced by a number of factors associated with regulative, normative, cognitive/mimetic mechanisms, as well as firms' and industries' attributes.

Tolbert and Zucker (1996) propose a three stages process of institutionalisation. The first, called habitualisation, is characterised by the development and formalisation of a new arrangement or structure in response to a problem the organisation (or a group of organisations) is facing. The number of adopters is low and although imitation may take place it is not highly likely as there is not yet consensus on the value of the innovation at hand (Tolbert and Zucker, 1996). Objectification, the second stage, represents a moment of semi-institutionalisation, which follows inter-organisation monitoring and a theorising of the value of the new practice. There is some degree of social consensus

among decision-makers about the value of the practice and an increasing number of organisations adopt it based on that consensus. However, despite some degree of normative acceptance, decision-makers still remain aware of the relatively untested value of the practice and continue to monitor evidence in this regard. Finally, sedimentation represents the third stage - full institutionalisation of a new practice. This stage is characterised by the adoption of the new practice by virtually all appropriate adopters and by the endurance of the practice or structure over a long period of time, across different generations of organisation decision-makers (Tolbert and Zucker, 1996). At later stages of institutionalisation adoption of a new practice is likely to become more a matter of ensuring legitimacy and "fit-in" than actually increasing efficiency (DiMaggio and Powell, 1983).

Given the particularities of the different stages of institutionalisation of a new practice, one could expect that different elements may be at play in informing and influencing firm decision to adopt a new practice in each stage. For one thing, Delmas and Montes-Sancho (2011) found evidence that the ISO14001 was more likely to be adopted early by firms in a country where there is high government commitment to the environment, a low to moderate number of law firms per capita and the presence of a strong civil society. The authors found, however, that the predictive power of these factors faded in later phases of diffusion. The next section will explore each of the elements that the literature has pointed as potential drivers for early or late adoption of voluntary CSR initiatives, with a particular focus on the UNGC.

# 6.1.1 Pushing the leaders - What factors may lead to early adoption?

It has been proposed that regulative or coercive pressures have a greater impact on the adoption of a new practice in the early phases of institutionalisation of said practice, but this power may reduce over time (Delmas and Montes-Sancho, 2011). As discussed in section 2.1.3.1, the regulative pillar is based on coercive isomorphism (Scott, 2008, DiMaggio and Powell, 1983), which stems from formal and informal pressures applied to organisations by actors upon whom organisations are dependent (DiMaggio and Powell, 1983). In other words, organisations will endeavour to resemble the structure, climate and behaviour of the organisation they are dependent upon (DiMaggio and Powell, 1983) or follow pressures exerted by them to adopt certain practices or behaviour.

The regulative pillar with its coercive mechanisms is often associated with the political system, or the state (Berrone et al., 2013, Delmas and Montes-Sancho, 2011). Governments may provide rewards for adoption or impose sanctions for non-adoption of a new initiative or practice. These coercive mechanisms can be very efficient in promoting sign up, notably in the early stages of institutionalisation, when there is greater uncertainty in regards to the benefits that can be accrued with participation (Delmas and Montes-Sancho, 2011). Therefore, the greater the government's support to the issues covered in the initiative, the more involved is the government in the design of the initiative, the more positive the government's attitude towards the initiative, the more likely it will be to provide firms with incentives for adoption and therefore, the more likely firms in the country will be to adopt the standard or join the initiative in the pre-institutionalised period (Delmas and Montes-Sancho, 2011).

In a study on the diffusion of ISO14001, Delmas and Montes-Sancho (2011) found that government's commitment to the environment, government's involvement on the design of the standard and government's promotion of other environmental management standards were all positive and significant in influencing adoption on the take-off phase of ISO14001. Following a similar reasoning for the UNGC, one would expect that government's support to the UN and to the principles will incentivise early joining of the initiative.

Hypothesis 1: Firms headquartered in countries whose government demonstrates support to the UN are more likely to join the UNGC early.

As discussed in section 2.1.3.2, normative pressures help define goals and objectives (for example: making a profit) while also defining what constitutes appropriate means to pursue them (for example: sustainable business practices) (Scott, 2008). The community, organised as non-governmental organisations (NGOs), may exercise normative pressure over firms to adopt a certain practice (Delmas and Montes-Sancho, 2011). NGOs have gained prominence over the last decades, and have been an important voice in seeking to define new roles and responsibilities for businesses (Perez-Batres et al., 2011). In line with Perez-Bastres et al (2011) NGOs are classified here as a normative force in shaping firm behaviour in regards to CSP in general, and voluntary CSR initiatives in particular.

In this context, and following Delmas and Montes-Sancho (2011), it is proposed that high concentration of NGOs in a country may influence early adoption of voluntary CSR initiatives. NGOs' pressure is proposed to be more intense and

therefore have a higher impact in the early phases of institutionalisation of an initiative; as NGOs are constantly instigating change, they might turn their attention to a newer initiative once the one at hand is already widely diffused (Delmas and Montes-Sancho, 2011).

Hypothesis 2: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. that are UNGC participants) are more likely to join the UNGC early.

In addition to factors exogenous to the organisation, and as discussed in section 3.2.3.2, Scott (2008) proposes that there are some attributes of the firm, which may be associated with early adoption of a standard or initiative. For one thing, firm size is proposed to lead to early adoption. The reasons underlying it are varied – larger organisations generally have more resources and therefore may be more prone to invest in new practices, larger organisations are more visible and therefore subject to greater scrutiny and pressures by stakeholders and larger organisations are more sensitive to environmental changes (Scott, 2008). In a study of the adoption of ISO14001, King and Lennox (2001) found that larger firms and firms which are under greater scrutiny tend to adopt the standard earlier. Arevalo et al (2013) also found that later adopters of the UNGC in the Spanish context were in general smaller companies. In views of this, it is proposed that:

Hypothesis 3: Larger firms are more likely to join the UNGC early.

Firm previous CSR performance has also been highlighted as a relevant factor. It has been proposed that firms that are higher performers in CSR will be more likely to be early adopters of new CSR voluntary initiatives (Delmas and Montes-Sancho, 2010). Given that they are high performers, the additional commitment or efforts to adopt the new practice will arguably be at a lower cost than for a poor performer (Delmas and Montes-Sancho, 2010). Moreover, their previous high performance may also offer protection for any mishaps or issues found following the adoption of a new standard or initiative, therefore, arguably lowering the perceived risks and consequently the firm's evidentiary threshold.

In addition to the lower costs and risks, a high performing firm may arguably see higher immediate benefits for "shouting its credentials" or sharing its good deeds through the visibility achieved with the new adoption (Delmas and Montes-Sancho, 2010). For one thing, Bansal and Hunter (2003) found that higher performers – or more specifically firms with higher environmental legitimacy and

fewer environmental crisis – were more likely to be early adopters of ISO14001. In the case of the UNGC, it would not sound unreasonable to suggest that high performers would be more likely to be early adopters, as they would probably already been managing some if not all of the UNGC issues at least to some extent. Joining would then be an opportunity to communicate their commitment and good performance to a larger audience of stakeholders.

Hypothesis 4: Firms that display higher corporate social performance are more likely to join the UNGC early.

It has also been also proposed that firms in high impact industries are generally subject to greater stakeholder scrutiny, and therefore are under greater pressure to demonstrate alignment with societal goals and attention to these matters (Bansal and Bogner, 2002). These firms – perceiving a greater threat to their legitimacy - arguably have greater incentives to proactively engage in voluntary CSR initiatives to signal to stakeholders their commitment and willingness to address such issues. Following this line, one would expect that firms that are in high impact industries have greater incentives to become early adopters of voluntary CSR initiatives. It is therefore hypothesised that:

Hypothesis 5: Firms in high impact industries are more likely to join the UNGC early.

Finally, as explained in section 3.2.3.2, it has been proposed that organisations for whom adoption of a practice is easier will be more prone to early adoption (King and Lenox, 2001). For one thing, it has been proposed that firms which are ISO9000 certified will be more likely to be early adopters of ISO14001 (King and Lenox, 2001, Perkins and Neumayer, 2010, Castka and Balzarova, 2008). Given the overlap between the two standards, it can be argued that previous experience in the ISO9000 is likely to lower costs, information needs (Perkins and Neumayer, 2010) and perceived risks associated with the implementation of ISO14001, therefore increasing uptake of the latter. This may be especially important in the early phases of adoption (King and Lenox, 2001), when uncertainty around the new initiative is greater and therefore reassurances such as these may see greater impact on firms' decision. While similarities and overlap between the UNGC and ISO14001 might not be as substantial, one can argue that they do overlap in a number of areas. Equally important, participation in one CSR initiative may reduce an organisation's hesitancy to participate in another one (Perkins and Neumayer, 2010). Based on this, it is proposed that:

Hypothesis 6: Firms with prior ISO14000 certification are more likely to join the UNGC early.

# 6.1.2 Pulling the laggards - What factors may lead to late adoption?

While much attention may be directed to early adoption, understanding factors that lead to late adoption are arguably equally relevant to understand the dynamics of the diffusion of an initiative. For one thing, mimetic mechanisms may see their importance increase in later phases of adoption. As discussed in section 3.2.3.1, institutional theory proposes that early adopters of new organisational practices, i.e. those that adopt it in the early stages of the institutionalisation process, do so in views of achieving improved performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008). As the institutionalisation of a practice progresses, the decision to adopt it becomes more of a requirement than a choice, as normative and cultural pressures reach a point where non-adopters risk to be seen as deviants from the norm, or behind the time (Scott, 2008). In other words, adopting the new practice becomes more a matter of ensuring legitimacy following a logic of appropriateness, than achieving efficiency, following a sense of instrumentality (Scott, 2008).

Hypothesis 7: Mimetic pressures are likely to be stronger in the late period of adoption than in the early days after the launch of the UNGC.

On a similar line, it has been proposed that geographic proximity is an important determinant of the adoption of innovation (Delmas and Montes-Sancho, 2011). The central idea is that decision makers act under cognitive constraints, therefore searching for solutions within a limited pool of available alternatives, which are recognised as more familiar to them (March and Simon, 1993). Delmas and Montes-Sancho (2011) propose that firms are likely to constrain their searches to contexts that are close to them geographically and therefore also culturally. The authors found, however, that geographic proximity requires a larger number of adopters to serve as an effective vehicle of diffusion of a new initiative and therefore is a relevant predictor in the later phases of adoption of the new practice (Delmas and Montes-Sancho, 2011). One could argue that enough volume of adoption is needed in a country for it to be remarked across borders through proximity, as very few adopters would probably disperse the information.

Hypothesis 8: Geographic proximity is an important predictor of sign up to the UNGC in the late period of adoption.

# 6.1.3 What factors may be equally important for early and late adoption?

Whereas for some factors a clear division may exist between their influences in early or late stages of adoption, others may have an impact on firms' behaviour throughout the existence of an initiative. Proximity through trade relations is an example of that. As discussed in section 3.2.3.2, this factor has been pointed as having an important impact on firm behaviour in regards to joining voluntary CSR initiatives. The arguments vary to some extent in regards to the source of pressure – while some authors focus on the state and the level of regulation in the country with which firms in the focal country are trading with (Perez-Batres et al., 2010), others recognise the role of firms as an important source of coercive isomorphism (Delmas and Montes-Sancho, 2011).

Firms may be subject to formal incentives for adoption of an initiative, for example, resulting from explicit requirements advanced by buyers for suppliers to adopt standards that are widely implemented in the buyer's country (Perkins and Neumayer, 2010). These incentives may also be more indirect, for example, firms trading with a country where many local firms have adopted a certain standard may need to adopt that standard as well in order to be able to trade with local firms (Delmas and Montes-Sancho, 2011). Such pressures are proposed to be important drivers not only on the early phases of adoption, when coercive pressure may be particularly effective to promote engagement, but also at later phases, when adoption is more widespread in countries with whom the focal country is trading with (Delmas and Montes-Sancho, 2011).

Equally, Perez-Bastres et al (2010) found that Latin American firms with stronger trade ties with Europe (as compared to the US) were more likely to join either the UNGC or the GRI. Given that Europe has a more stringent environmental regulation as compared to the US (Perez-Batres et al., 2010), firms embedded in the European institutional environment would be more prone to demanding this kind of behaviour and engagement from firms they are trading with, formally or informally. In addition, the EU is pointed as a "partial exception" to the notion of CSR as voluntary given a number of directives it has put in place to govern sustainability issues, such as for example the Directive for Waste of Electrical and Electronic Equipment which imposes obligations in regards to the collection, recycling and disposal of these types of materials (Perez-Batres et al.,

2011). Once again, firms trading with Europe would arguably be under greater pressure to display commitment to sustainability issues. While the authors do not theorise about effects on different stages of adoption, one could argue that this pressure would be present and driving engagement in early as well as later phases of adoption. It is unlikely that the level of regulatory stringency in such countries may change as well as pressures for higher CSP from trade partners.

Hypothesis 9: Firms in trade proximity with the EU are equally likely to join the UNGC in the early or late periods.

Normative pressures have been typically associated with professionalisation (DiMaggio and Powell, 1983) (see also section 2.1.3.2). Two aspects of professionalisation are important sources of organisational isomorphism: standards set by formal university education, and professional networks, which cross organisations and through which new models diffuse (DiMaggio and Powell, 1983). Professionals and management consultants are an example of the latter – through their work they help disseminate practices and standards across organisations.

For the case of ISO14001, it has been argued that professionals and management consultants with experience in ISO9000 are likely to become certifiers in ISO14001 as well, given the similarities between the standards, i.e. they will have a material stake in the promotion of the new standard and therefore are likely to become "champions" of it (Delmas and Montes-Sancho, 2011). While their role may be key in the early stages of diffusion, when firms have less knowledge about the standard and therefore may need greater support, they are likely to keep pushing for implementation in later phases as well, even once the standard has been diffused more broadly in the country (Delmas and Montes-Sancho, 2011). Based on this argument, Delmas and Montes-Sancho (2011) found support for the proposition that a higher number of ISO9000 certified firms in a country will lead to higher likelihood of early and late adoption of ISO14001 in that country.

In the case of the UNGC, however, it is more challenging to make similar propositions, as the initiative does not have a clear "predecessor" which could lead to the immediate building of experience as proposed above. It would be interesting to know, however, whether previous experience with the GRI generates greater likelihood of early or late UNGC sign up. While the GRI is not a predecessor to the UNGC per se, it was established earlier (in 1997) and there are synergies between them – for one thing, the UNGC encourages firms

to use the GRI guidelines when submitting their communication on progress (Lim and Tsutsui, 2012). Building on Delmas and Montes-Sancho (2011), it is therefore proposed that:

Hypothesis 10: Firms headquartered in countries with a high number of GRI participants are equally likely to join the UNGC in the early and late periods.

# 6.1.4 Control variables

#### 6.1.4.1 Slack resources

Slack resources have been proposed to be important predictors for firm's decision to engage in voluntary CSR initiatives. Organisations that dispose of slack resources are likely to be more willing to take the risk of adopting a new practice in a time when uncertainty regarding benefits for adoption is still very high (King and Lenox, 2001).

### 6.1.4.2 Brand value

It is argued that firms in markets where product differentiation and branding are relevant competing tools would accrue higher benefits from joining initiatives that help signalling to trade partners their commitment and the quality of their actions in the management of these issues (Johnstone and Labonne, 2009). Johnstone and Labonne (2009) found signalling to trade partners to be an important motivator at least for larger firms to adopt and certify their environmental management systems. In the case of the UNGC, while it is not a certification, it arguably also has the power to convey a message about the firms' engagement with CSR. Therefore, it is expected that firms competing on those basis will be more likely to join the UNGC, and given the high incentives, it is proposed that they will be more likely to join in early phases.

# 6.1.4.3 Level of regulation

Greater acquiescence with regulations, rules and laws can arguably offer the organisation some protection from political risks (in the form of closer monitoring, for example) and legal coercion (in the form of more stringent regulation or enforcement of existing regulations) (Berrone et al., 2013). Engagement in voluntary CSR initiatives arguably sends a signal to regulators that the firm is seeking to improve its CSP, going beyond basic requirements of regulations (Johnstone and Labonne, 2009, Potoski and Prakash, 2005a). Therefore, a public commitment to these initiatives may not only help firms improve legitimacy but also avoid penalties for non-compliance (Berrone et al., 2013) or

the bearing of more stringent regulation (Delmas and Montes-Sancho, 2011). A more stringent regulatory environment is therefore arguably going to offer more incentives to increasing firm engagement in voluntary initiatives, leading to early adoption of such initiatives.

# 6.1.4.4 Democracy

Home country level of democracy has been pointed as a potential influence on firms' inclination to engage in CSR initiatives (Bernhagen and Mitchell, 2010, Bennie et al., 2007, Perkins and Neumayer, 2010, Bernhagen et al., 2012). Governments in countries that display a more democratic political system usually demonstrate concern for a wider set of societal interests (Bennie et al., 2007, Perkins and Neumayer, 2010). Equally, more democratic countries normally outperform less democratic peers in a number of welfare areas, including the issue areas of the UNGC (Bennie et al., 2007) and are more prepared to listen to critical voices in society, including in regards to corporate behaviour (Perkins and Neumayer, 2010, Bernhagen et al., 2012). Therefore, it is proposed that firms under the realm of more democratic governments will be under greater pressure (actual or perceived) and thus have greater incentives to incorporate a larger number of welfare concerns into its daily business. Firms in more democratic countries, therefore, are expected to be more likely to join early.

# 6.2 Data

This study uses data provided by ThomsonReuters ASSET4, combined with institutional data provide by a number of publicly available sources (see below and chapter three for a full list and description) as well as some UNGC data on participation and firm level data provided by Datastream.

# **6.2.1** Sample

This study focuses on a subset of the ASSET4 data, more specifically the data for the year 2010. This comprises a total of 4,580 firms, from 59 countries and 70 different industries.

# 6.2.2 Dependent variable

## 6.2.2.1 Dividing the time

Dividing the time into early and late periods of adoption is arguably fundamental for any empirical analysis of the diffusion of a practice or initiative. The rationale for this division, however, is often not clearly explained in the literature, and where it is, there is no consistency across articles in the choices made to define such periods. To some extent this can be expected. The literature covers a wide range of phenomena, from adoption of civil service reforms by US cities (Tolbert and Zucker, 1983), to certifying ISO14001 (Albuquerque et al., 2007), to becoming a UNGC participant (Arevalo et al., 2013), to adoption of manufacturing best practice programs (Love and Cebon, 2008), to innovation in human resources practices in law firms (Sherer and Lee, 2002), to adoption of total quality management in public hospitals (Young et al., 2001), among others. One would expect that such different phenomena would vary in terms of time of diffusion to say the least. However, at the same time, this is somewhat surprising. The wide variety of solutions used to operationalise stages of adoption – even when there are reasonably clear definitions in the literature on the characteristics of each stage - seems to suggest that there is no consensus on the most appropriate way to do it.

An overview of the articles illustrates this variety. Some authors, for example, divided the period of the study into four (Tolbert and Zucker, 1983) or two (Arevalo et al., 2013) years groups. The reasons underlining the choice of such cutting points are not clear though. Some articles focus on the first years following the launch of an initiative and therefore claim to focus only on early adoption (Perkins and Neumayer, 2010, Bansal and Hunter, 2003). However, what constitutes the early years varies — for example, while Perkins and Neumayer (2010) cover a period of the first five years of the UNGC and ISO14001, Bansal and Hunter (2003) focus on the first two years after the launch of ISO14001. Kennedy and Fiss (2009) follow Westphal et al (1997) by defining stages of adoption in relation to the year their survey was done. They divided the time into three periods: two years before the survey, between two and four years, and over four years prior to the survey.

More detailed explanations were found in some articles, although they differ amongst themselves. Burns and Wholey (1993) divide the period in two – the dividing year being chosen to reflect a stabilization in cumulative adoption of the matrix structure that occurred in the country. Young et al (2001), in a study of adoption of total quality management in public hospitals, chose the year prior to the peak on the annual number of adoption as their dividing point between early and late stages. Finally, Delmas and Montes-Sancho (2011) divide their 10 years of ISO14001 adoption in two – pre-institutionalisation or take-off period and semi-institutionalisation period. The cutting point was chosen as 2001, when 50% of UN countries had firms that were ISO14001 certified. While

Delmas and Montes-Sancho's (2011) rationale is interesting, there are certainly weaknesses to it. Reaching 50% of UN countries does not imply in an even level of adoption within countries and it could possibly be the case that some countries at that point have only one participant, which would arguably not reflect a "wide diffusion" of the initiative.

Given those challenges and lack of clarity on the literature on the most appropriate mean to divide the time, this study used the division of time that offered the best econometric solution, i.e. that divided the total number of participants in roughly similar groups in size. More details are provided below.

# 6.2.2.2 Choosing a dependant variable

Choice of dependant variable was varied across diffusion studies, although more consistency is found here compared to the division of time. Most variables aimed to reflect adoption over time, with some variations in the approach. Variables were chosen to represent: number of adopters per year per country (Delmas and Montes-Sancho, 2011, Tolbert and Zucker, 1983); growth on number of adopters per year per country (Albuquerque et al., 2007); binary variable indicating whether the firm is an early or late adopter (Arevalo et al., 2013); binary variable indicating whether the firm has adopted the practice at some point in the studied period (Burns and Wholey, 1993, Bansal and Hunter, 2003); number of adopters in a country per year normalized by population size (Perkins and Neumayer, 2010), among others.

The objective of this study is to understand patterns and drivers for adoption of the UNGC, and how the influence of these drivers change over time; in other words, what elements may drive firms to early or late adoption. Therefore, the dependant variable needs to capture the point in time when the firm joined the UNGC. Aggregate the data per country is not ideal in this case, as firm and industry level variables are also being considered as factors that may drive adoption and a country level aggregate would arguably prevent a closer examination of these factors. Focus on growth rather than year of joining was used by Albuquerque et al (2007) to account for the fact that firms need to recertify in ISO14001 every three years, and not all firms choose to do so. Some parallel may be drawn with the UNGC and the need to submit a COP to maintain the status of participant - not all firms decide to produce a report, and this results in some being delisted from the initiative. However, the purpose of this study is to understand what leads to early or late adoption therefore when

the firm join is the most relevant data and once again an aggregate may prevent a more fine-grained analysis.

Initially the study used two dependant variables, reflecting whether the firm was an early (joining date between 2000 and 2007) or late adopter (joining date between 2008 and 2010). This division built on Delmas and Montes-Sanchos' (2011) rationale, as 2007 is roughly when 50% of UN countries had at least one UNGC participant (based on UNGC sign up data). The split, however, was also good from an econometric point of view, as it allowed for two groups that had approximately the same size. However, there was a need to recalibrate the dependant variables to allow for a more nuanced analysis. The objective was to be able to better observe especially the very early joiners of the UNGC. The solution was to divide the dependant variables into three periods, as per the list below. The three new dependant variables were guided by the initial division, but chosen to share the number of participants into three groups of approximately the same size:

- 1. Very early joiners: this variable takes a value of 1 if the firm joined between 2000 and 2003, 0 if it never joined and "missing" if it had joined in any other period;
- 2. Middle joiners: this variable takes a value of 1 if the firm joined between 2004 and 2007, 0 if it never joined and "missing" if it had joined in any other period;
- 3. Late joiners: this variable takes a value of 1 if the firm joined between 2008 and 2010, 0 if it never joined and "missing" if it had joined in any other period.

In order to test for robustness, however, models were also run using the initial two variables, yielding similar results.

# 6.2.2.3 Independent Variables

Government's support to the UN reflects whether a country had ratified/presented the appropriate expression of support to the international agreements/declarations/treaties that underlie the UNGC 10 principles, by the end of 2009. Data for the following international instruments were used: International Covenant of Civil and Political Rights, International Covenant of Economic, Social and Cultural Rights, the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development and the United Nations Convention Against

Corruption. This data was obtained from the United Nations' website and is represented by a dummy variable (1 for yes and 0 for no). In the case of human rights and labour, where more than one international instruments are at the base of the principles, a country only received a "1" if they had demonstrated support for all of them by the end of 2009. The use of this variable is inspired by and builds mainly on the work of Lim and Tsutsui (2012) but of some other authors as well (Bennie et al., 2007, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012).

*NGOs concentration in a country* is represented by the cumulative participation of such organisations (global and local NGOs) in the UNGC in each country as of 2009. These variables were calculated using data from the UNGC dataset and follow similar use in the literature (Bernhagen et al., 2012, Perez-Batres et al., 2011).

*Firm size* was measured as the log of employees in 2009, calculated from the variable number of employees provided by Datastream.

Corporate Social Performance was measured using the following variables from ASSET4: CVGSCORE (corporate governance), SOCSCORE (social) and ENVSCORE (environment), all for 2009. Scores are a number between 0 and 100 that show the firm's performance in comparison to the remaining ASSET4 universe for a particular issue.

A dummy for *extractive industry* was created in SPSS. It gathers firms classified under SIC codes 10 (metal mining), 12 (coal mining), 13 (oil and gas extraction) and 14 (mining and quarrying of non-metallic minerals, except fuels). As discussed in chapter four, recognising the lack of a one fully agreed definition of high impact/extractive industry, this study follows EITI (Extractive Industry Transparency Initiative)'s focus on oil, gas and mining companies as firms in the extractive industry (EITI, 2014).

Prior *ISO 14001 certification* was obtained from ASSET4. This is a dummy variable that takes a value of 1 if the firm was ISO14001 certified in 2009 and 0 if otherwise.

Mimetic Pressures were measured as UNGC penetration in country and industry. These were calculated from ASSET4 data and reflect the percentage of firms in the sample that were participants in a given industry, or a given country in 2009.

That follows and builds on Lim and Tsutsui (2012) use of number of participants in the country lagged by one year as an independent variable.

Geographic proximity was also calculated from ASSET4 data and represents the number of UNGC participants in a given geographical sub-region of the world in 2009, namely: Australia and New Zealand, Central America, Central Asia, Eastern Africa, Eastern Asia, Eastern Europe, Northern Africa, Northern America, Northern Europe, South America, South-Eastern Asia, Southern Africa, Southern Asia, Southern Europe, Western Africa, Western Asia, Western Europe. Country classifications were taken from the United Nations Statistics Division. This builds on Lim and Tsutsui (2012) use of a similar measure, although these authors used broader geographic areas.

This study measures *trade proximity with the EU* at firm level in order to allow for a more fine-grained analysis of the impact of this relationship in each firm's decision to join the UNGC. This indicator was calculated using Datastream data for home country and trade activities outside of home country. It takes a value of 1 if a firm is not from the EU but has trade activities with it and a value of zero if otherwise (firm from the EU or firm not from the EU but has no trade activities with the EU).

*GRI participation in country* was calculated by aggregating at country level the ASSET4's 2009 data on firm's use of GRI in reporting, using SPSS.

# 6.2.2.4 Control variables

*Slack resources* are represented by ROTA (return on total assets) and Leverage (which is built from a ratio of long term debt by assets). This data was obtained from Datastream for the year 2009.

Advertising intensity was built as a ratio of advertisement expenditure by total sales for the year 2009. The data was obtained from Datastream.

Stringency of regulatory environment was operationalized following Berliner and Prakash (2010). It encompasses measures of the stringency of credit market regulations, labour market regulations and business regulations, taken from the Economic Freedom of the World dataset. For these indicators, the larger the number the higher the freedom or the less stringent the regulatory environment is. For more details on these variables please see chapter three.

In line with a number of previous studies, *Level of democracy* was represented by the Polity IV dataset provided by the Centre for Systemic Peace (Perkins and

Neumayer, 2010, Lim and Tsutsui, 2012, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012). This indicator ranges from +10 (full democracy) to -10 (full autocracy).

# 6.3 Methods for analysis

Given that the outcome variable is a categorical variable (early, middle or late joiner) and the predictor variables are both continuous and categorical, the method used for data analysis was binary logistic regression (Field, 2009).

# 6.4 Results

The figure below presents descriptive statistics and Pearson correlation coefficients for the variables of this study. It can be observed that the dependent variables are significantly correlated to most independent variables. Differently from expected, however, the dependant variable representing early joiners is negatively correlated to GRI penetration in firms' home country and NGO participation in the UNGC locally (both significant at the 0.01 level). Also different from expected this dependant variable is not significantly correlated to variables representing slack resources, country support declarations/covenants on the Environment and Corruption and trade proximity to the EU. GRI penetration was also negatively correlated (at the 0.01 level) to late joining, against expectations.

Figure 5: Descriptive statistics and Pearson correlation coefficients

Correlations	Descripti	ve Statistics																											
	Mean	Std. Deviation	N	1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Very Early joiners until 2003	0.0392	0.19401	4213	1																									
Middle joiners 2004 to 2007	0.0444	0.20597	4236	.a 1																									
Late joiners 2008 to 2010	0.0535	0.22514	4277	.a .a	1																								
ROTA	3.7933	31.10044	4242 0.0	0.001	0.008	1																							
Leverage	18.9849	18.21263	4299 0.0	0.016	-0.003	0.007	1																						
Advertising intensity	1.0746	33.50389	4542 -0.	002 0	-0.003	-0.002	-0.017	1																					
Credit market regulation	8.01	1.279	4570 0.0	0.006	.048**	045**	112**	-0.001	1																				
Labour market regulation	7.73	1.528	457018	35**169*	*154**	038*	.056**	0.01	222**	1																			
Business regulation	6.58	0.68	457010	03**135*	*083**	-0.019	0.009	-0.012	.252**	.508**	1																		
Polity IV	8.52	4.187	4575 .04	3** 0.012	0.02	040**	.089**	0.008	170**	.072**	130**	1																	
Government support to human rights	0.6	0.49	4578 .14	9** .117*	.133**	051**	-0.02	0.012	.390**	353**	286**	.272**	1																
Government support to labour	0.31	0.462	4578 .21	.114**	.137**	.033*	0.026	-0.014	0.013	450**	091**	.137**	.418**	1															
Government support to environment	0.97	0.167	4578 0.0	028 -0.003	0.011	036*	.053**	0.005	125**	.182**	.085**	-0.02	.211**	256**	1														
Government support to anti-Corruption	on 0.84	0.37	4578 -0	.03074*	*064**	0.016	.033*	041**	056**	.031*	.266**	102**	351**	.052**	076**	1													
Local NGOs	24.092	25.7059	458004	47**061*	*093**	0.024	.140**	-0.011	704**	.419**	.080**	.258**	627**	289**	.141**	.338**	1												
Global NGOs	7.514	8.6325	458007	78**097*	*103**	0.024	.131**	-0.01	747**	.540**	.223**	.244**	647**	229**	.149**	.318**	.948**	1											
Firm size	8.8241		3728 .21	.5** .173*	.125**	.067**	-0.003	-0.002	139**	061**	124**	071**	086**	.042*	0.005	123**	.047**	.045**	1										
SOCSCORE	50.0554			2** .305*											115**				.465**	1									
ENVSCORE	49.7426	31.79824	3882 .27	0** .255*	.258**	0.016	.049**	.044**	-0.014	145**	084**	.149**	.197**	.245**	050**	195**	094**	081**	.444**	.808**	1								
CGVSCORE	52.2805			1** 0.015														.500**				1							
Extractive industry	0.1135			40* -0.02																			1						
ISO14001 certified	0.42			9** .197*														161**											
UNGC participants in home country	0.1356			5** .250*																					1				
UNGC participants in the industry	0.1399			9** .093*			-0.026											052**								1			
Regional UNGC participation	61.6172			7** .068*			0.011				.223**							0.011								.031*	1		
Trade with the EU	0.1122			006 0.026		0.016			038**									.179**											
GRI participation in home country	83.3537	74.02874	458011	16**084*	*096**	-0.008	.095**	0.021	622**	.653**	.146**	.346**	516**	447**	156**	052**	.778**	.818**	.072**	058**	-0.014	.333**	106**	092**	339**	062**	.057**	.273**	1

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

a Cannot be computed because at least one of the variables is constant.

While most correlation coefficients conform to the norms, correlation coefficients between NGOs that are UNGC participants (i.e. Local NGOs and Global NGOs, which are UNGC participants) present a concern for multicollinearity as the coefficient is greater than 0.8 (Field, 2009). Also as observed in chapter 6, the correlation coefficient between social and environmental performance is also greater than 0.8. Interestingly, GRI penetration in home country also presented a concern for multicollinearity with a correlation coefficient of 0.818 in relation to the penetration of global NGOs in home country. Given the potential multicollinearity concern, further tests were run to check the Variance Inflation Factors (VIF). Using linear regression in SPSS, tables 13 to 15 below were prepared:

Table 16: VIF, dependent variable: very early joiners

	Collinearity	Statistics
	Tolerance	VIF
(Constant)		
ROTA	0.964	1.037
Leverage	0.935	1.069
Advertising intensity	0.946	1.057
Credit market regulation	0.153	6.547
Labour market regulation	0.203	4.916
Business regulation	0.255	3.925
Polity IV	0.345	2.898
Government support to human rights	0.140	7.118
Government support to labour	0.227	4.4
Government support to environment	0.564	1.774
Government support to anti-Corruption	0.377	2.654
Local NGOs	0.027	36.722
Global NGOs	0.020	50.765
Firm size	0.641	1.56
SOCSCORE	0.305	3.28
ENVSCORE	0.280	3.567
CGVSCORE	0.338	2.96
Extractive industry	0.830	1.204
ISO14001 certified	0.582	1.717
UNGC participants in home country	0.301	3.323
UNGC participants in the industry	0.885	1.13
Regional UNGC participation	0.305	3.279
Trade with the EU	0.782	1.278
GRI participation in home country	0.097	10.346
a Dependent Variable: Very Early joiners	until 2003	

Although there is not a clearly established threshold of when a value of VIF should become a concern, this study follows Field (2009) in that values above 10 signal potential problems of multicollinearity. It is clear on table 13 that social and environmental performance do not seem to present a concern here; however, variables representing both local and global NGO participation in the UNGC have VIFs above 10. In addition, these variables have tolerance statistics below 0.1 suggesting serious problems of multicollinearity (Field, 2009). GRI participation in home country has a VIF slightly above 10, and a tolerance of approximately 0.1.

While this does not present a concern as important as in the case of NGO participation, this information will be considered when running the models.

For the case of NGO participation, in order to prevent the unwanted effects of multicollinearity, models were run separately with each of these variables. Given the better contribution of local NGO participation to the explanatory power and the fact that the variable for Global NGOs also had a coefficient correlation greater than 0.8 in regards to GRI participation, NGO participation at local level was the variable retained.

Table 17: VIF, dependent variable: middle joiners

	Collinearity	Statistics
	Tolerance	VIF
(Constant)		
ROTA	0.965	1.037
Leverage	0.938	1.066
Advertising intensity	0.943	1.061
Credit market regulation	0.163	6.129
Labour market regulation	0.203	4.915
Business regulation	0.258	3.879
Polity IV	0.344	2.905
Government support to human rights	0.145	6.876
Government support to labour	0.24	4.169
Government support to environment	0.537	1.863
Government support to anti-Corruption	0.346	2.894
Local NGOs	0.025	40.076
Global NGOs	0.019	52.891
Firm size	0.646	1.547
SOCSCORE	0.311	3.219
ENVSCORE	0.285	3.511
CGVSCORE	0.333	3.001
Extractive industry	0.827	1.21
ISO14001 certified	0.581	1.723
UNGC participants in home country	0.305	3.276
UNGC participants in the industry	0.894	1.119
Regional UNGC participation	0.312	3.206
Trade with the EU	0.78	1.282
GRI participation in home country	0.089	11.185
a Dependent Variable: Middle joiners 200	04 to 2007	

Table 18: VIF, dependent variable: late joiners

	Collinearity	Statistics
	Tolerance	VIF
(Constant)		
ROTA	0.963	1.038
Leverage	0.936	1.069
Advertising intensity	0.944	1.059
Credit market regulation	0.156	6.43
Labour market regulation	0.21	4.759
Business regulation	0.266	3.756
Polity IV	0.348	2.874
Government support to human rights	0.145	6.913
Government support to labour	0.232	4.302
Government support to environment	0.549	1.82
Government support to anti-Corruption	0.346	2.894
Local NGOs	0.023	43.982
Global NGOs	0.018	55.984
Firm size	0.655	1.528
SOCSCORE	0.314	3.189
ENVSCORE	0.284	3.515
CGVSCORE	0.333	3.006
Extractive industry	0.824	1.213
ISO14001 certified	0.59	1.694
UNGC participants in home country	0.316	3.168
UNGC participants in the industry	0.898	1.113
Regional UNGC participation	0.308	3.242
Trade with the EU	0.783	1.276
GRI participation in home country	0.088	11.403
a Dependent Variable: Late joiners 2008	to 2010	

Similar results were obtained when using middle joiners and late joiners as the dependent variable – the main point of concern were the variables representing participation of local and global NGOs in the UNGC at the country level.

The results of the logistic regressions are presented in the tables below. The dependent variables are three: early joiners, middle joiners and late joiners, which take the values as described above.

Table 19: Regression table - dependent variable: very early joiners

Dependent variable: Very Early Joiners (2000-2003)	M1	M4	M7	M10	M13
Constant	-0.437 (0.867)	-12.214 (1.969) ***	-4.266 (1.136) ***	-0.458 (0.849)	-14.726 (2.233) ***
ROTA	-0.003 (0.007)	0.01 (0.014)	0.006 (0.008)	-0.004 (0.007)	0.013 (0.014)
Leverage	0.006 (0.004)	-0.001 (0.007)	-0.003 (0.005)	0.006 (0.004)	-0.001 (0.007)
Advertising intensity	0 (0.003)	0.017 (0.034)	-0.007 (0.032)	0 (0.003)	0.003 (0.04)
Credit market regulation	0.062 (0.084)	0.318 (0.12) ***	-0.032 (0.103)	-0.087 (0.092)	-0.202 (0.157)
Labour market regulation	-0.538 (0.059) ***	-0.299 (0.098) ***	0.051 (0.088)	-0.402 (0.073) ***	0.204 (0.13)
Business regulation	-0.242 (0.138) *	-0.556 (0.216) **	-0.504 (0.19) ***	-0.161 (0.138)	-0.094 (0.289)
Polity IV	0.236 (0.072) ***	-0.011 (0.076)	0.067 (0.048)	0.255 (0.071) ***	0.07 (0.079)
Government support to human rights		1.748 (0.6) ***			0.746 (0.708)
Government support to labour		0.815 (0.315) **			-1.29 (0.614) **
Government support to environment		0.758 (1.246)			-0.614 (1.499)
Government support to anti-Corruption		0.026 (0.284)			0.076 (0.314)
Local NGOs		0.019 (0.009) **			0.013 (0.011)
Firm size		0.457 (0.079) ***			0.466 (0.09) ***
SOCSCORE		0.038 (0.009) ***			0.043 (0.01) ***
ENVSCORE		0.018 (0.009) **			0.014 (0.009)
CGVSCORE		0.015 (0.005) ***			0.014 (0.006) **
Extractive industry		0.322 (0.43)			1.027 (0.469) **
ISO14001 certified		0.436 (0.265)			0.032 (0.289)
UNGC participants in home country			6.789 (0.618) ***		7.332 (0.914) ***
UNGC participants in the industry			8.283 (1.287) ***		8.046 (1.716) ***
Regional UNGC participation			0.012 (0.004) ***		0.01 (0.007)
Trade with the EU				0.281 (0.191) -0.007	0.379 (0.286) -0.017
GRI participation in home country N	3741	2927	3741	(0.002)	(0.005) ***
Nagelkerke R Square	0.13	0.499	0.369	0.139	0.589
Percentage correct cases	0	40.6	21.6	0	48.8
Difference in Nagelkerke R Square relative to Model 1		0.4	0.2	0.0	0.5

Table 20: Regression table - dependent variable: middle joiners

Dependent variable: Middle Joiners	M2	M5	M8	M11	M14
(2004-2007)	IVIZ	IVIO	IVIO	IVIII	101 14
Constant	1.505 (0.682) **	-6.61 (1.494) ***	-1.116 (0.802)	1.552 (0.683) **	-7.922 (1.586) ***
ROTA	-0.012 (0.006) **	-0.019 (0.009) **	-0.011 (0.007)	-0.013 (0.006) **	-0.017 (0.01) *
Leverage	0.005 (0.004)	0.006 (0.006)	0.001 (0.004)	0.006 (0.004)	0.004 (0.006)
Advertising intensity	0 (0.002)	0.044 (0.031)	0 (0.003)	0 (0.002)	0.03 (0.031)
Credit market regulation	-0.003 (0.075)	0.077 (0.108)	0.01 (0.08)	-0.014 (0.09)	0.017 (0.12)
Labour market regulation	-0.413 (0.056) ***	-0.334 (0.084) ***	-0.144 (0.068) **	-0.425 (0.075) ***	-0.298 (0.112) ***
Business regulation	-0.299 (0.117) **	-0.23 (0.18)	-0.405 (0.143) ***	-0.289 (0.12) **	-0.091 (0.206)
Polity IV	0.049 (0.024) **	-0.095 (0.038) **	-0.001 (0.023)	0.051 (0.025) **	-0.121 (0.046) ***
Government support to human rights		1.538 (0.462) ***			1.546 (0.552) ***
Government support to labour		-0.058 (0.268)			-0.256 (0.351)
Government support to environment		-1.079 (0.738)			-1.17 (0.867)
Government support to anti-Corruption		-0.27 (0.262)			0.027 (0.301)
Local NGOs		0.011 (0.007)			0.001 (0.009)
Firm size		0.348 (0.07) ***			0.337 (0.073) ***
SOCSCORE		0.052 (0.008) ***			0.053 (0.008) ***
ENVSCORE		0.003 (0.007)			0 (0.007)
CGVSCORE		0.007 (0.004)			0.007 (0.005)
Extractive industry		0.578 (0.352)			0.848 (0.365) **
ISO14001 certified		0.371 (0.236)	0.000		0.288 (0.243)
UNGC participants in home country			3.992 (0.551) ***		3.105 (0.808) ***
UNGC participants in the industry			4.973 (1.1) ***		3.802 (1.471) **
Regional UNGC participation			0.004 (0.003)	0.426	-0.003 (0.004)
Trade with the EU				0.436 (0.179) **	0.178 (0.227)
GRI participation in home country	2764	2945	2764	0 (0.002)	0.005 (0.004)
Nagelkerke R Square	3761 0.095	0.397	3761 0.176	3761 0.1	2945 0.416
Percentage correct cases	0.000	18.5	1.1	0	23.6
Difference in Nagelkerke R Square relative to Model 2		0.302	0.081	0.005	0.321

Table 21: Regression table - dependent variable: late joiners

Dependent variable: Late Joiners (2008-2010)	M3	M6	M9	M12	M15
Constant	-0.7 (0.688)	-6.38 (1.4) ***	-3.181 (0.777) ***	-0.553 (0.681)	-7.62 (1.488) ***
ROTA	-0.004 (0.006)	-0.007 (0.01)	-0.002 (0.007)	-0.004 (0.006)	-0.004 (0.011)
Leverage	0.001 (0.004)	-0.002 (0.005)	-0.003 (0.004)	0.001 (0.004)	-0.003 (0.005)
Advertising intensity	-0.001 (0.004)	-0.016 (0.036)	-0.006 (0.032)	-0.001 (0.004)	-0.035 (0.038)
Credit market regulation	0.124 (0.067) *	0.195 (0.1) *	0.127 (0.072) *	0.049 (0.082)	0.081 (0.121)
Labour market regulation	-0.343 (0.05) ***	-0.235 (0.072) ***	-0.117 (0.059) **	-0.301 (0.063) ***	-0.311 (0.096) ***
Business regulation	-0.156 (0.116)	-0.174 (0.175)	-0.222 (0.137)	-0.126 (0.117)	0.047 (0.199)
Polity IV	0.055 (0.023) **	-0.046 (0.031)	0.022 (0.022)	0.066 (0.023) ***	-0.079 (0.04) **
Government support to human rights		0.737 (0.385) *			0.764 (0.473)
Government support to labour		0.372 (0.234)			0.408 (0.321)
Government support to environment		0.249 (0.681)			0.764 (0.791)
Government support to anti-Corruption		-0.024 (0.234)			0.29 (0.283)
Local NGOs		-0.001 (0.008)			-0.023 (0.009) **
Firm size		0.119 (0.06) **			0.086 (0.064)
SOCSCORE		0.032 (0.006) ***			0.032 (0.006) ***
ENVSCORE		0.017 (0.006) ***			0.016 (0.006) ***
CGVSCORE		0.006 (0.004)			0.01 (0.004) **
Extractive industry		-0.286 (0.385)			-0.098 (0.408)
ISO14001 certified		0.073 (0.196)			-0.115 (0.205)
UNGC participants in home country			3.681 (0.505) ***		3.566 (0.728) ***
UNGC participants in the industry			5.115 (0.909) ***		4.25 (1.169) ***
Regional UNGC participation			0.003 (0.002)		-0.009 (0.004) ***
Trade with the EU				0.539 (0.157) ***	0.507 (0.191) ***
GRI participation in home country				-0.003 (0.002) *	0.009 (0.004) **
	3805	2971	3805	3805	2971
N		ሀ 3ሀላ	0 1/12	0.074	በ3/5
	0.066	0.304 3.4	0.143 0.4	0.074 0	0.345 11.8

Table 22: Regression table - dependent variables: earlyvsnever and latevsnever

(M16) and LateVsNever (M17)	M16	M17
Constant	-9.558 (1.451) ***	-7.489 (1.342) ***
ROTA	-0.01 (0.009)	-0.001 (0.01)
Leverage	-0.002 (0.006)	(0.005)
Advertising intensity	0.014	-0.013
	(0.029)	(0.031) 0.035
Credit market regulation	(0.112)	(0.112)
Labour market regulation	0.009 (0.099)	-0.292 (0.086) ***
Business regulation	-0.331 (0.203)	0.135 (0.181)
Polity IV	-0.049 (0.048)	-0.086 (0.035) **
Government support to human rights	1.241 (0.532) **	0.88 (0.424) **
Government support to labour	-0.55 (0.37)	0.188 (0.292)
Government support to environment	-1.103 (0.862)	0.486 (0.724)
Government support to anti-Corruption	0.042 (0.256)	0.192 (0.257)
Local NGOs	0.003 (0.008)	-0.015 (0.008) *
Firm size	0.394 (0.065) ***	0.115 (0.059) *
SOCSCORE	0.047 (0.007) ***	0.036 (0.006) ***
ENVSCORE	0.004 (0.006)	0.013 (0.005) **
CGVSCORE	0.012 (0.004) ***	0.006 (0.004)
Extractive industry	0.993 (0.334) ***	0.059 (0.354)
ISO14001 certified	0.272 (0.217)	-0.092 (0.189)
UNGC participants in home country	5.185 (0.7) ***	3.675 (0.678) ***
UNGC participants in the industry	6.216 (1.3) ***	3.454 (1.072) ***
Regional UNGC participation	0.003 (0.004)	-0.008 (0.003) ***
Trade with the EU	0.253 (0.199)	0.522 (0.177) ***
GRI participation in home country	-0.003 (0.003)	0.006 (0.003) **
N	3056	3015
Nagelkerke R Square	0.548	0.363 13.9

# Model 1, 2 and 3: Base models

Models one, two and three are the most parsimonious ones, comprising variables for slack resources, advertising intensity, level of regulation and level of democracy. In Model 1, early joiners is the dependent variable, for model 2 the dependent variable is middle joiners and for model 3 it is late joiners. In model 1, one can see that for early joiners a more democratic political environment and more stringent labour and business regulation are associated with higher odds of firms joining in this period. For one thing, firms in more democratic countries are 1.27 times more likely to join early (p<0.01). The model, however, offers a poor fit explaining only 13% of the variation (Nagelkerke R<sup>2</sup>) and classifying none of the early joiners correctly.

For middle joiners (model 2), a more democratic political environment and more stringent labour and business regulation are also associated with higher odds of firms joining in this period. Slack resources, however, differently from expected, decreases the odds of firms joining in this period. Model 2 explains only 9.5% of the variation (Nagelkerke R<sup>2</sup>), and is also not able to correctly classify any of the firms that joined in this period.

For late joiners (model 3) more stringent labour regulation and a more democratic political system remain significant in increasing the odds of joining in later periods. Model 3, however, has a worse fit than the previous two, explaining 6.6% of variation (Nagelkerke R<sup>2</sup>) and not classifying any of the late joiners correctly.

## M4, M5 and M6: Variables relevant for early joining

Models 4, 5 and 6 build on models 1, 2 and 3, adding to them the variables that the theory says are relevant in increasing the odds for firms joining early. Model 4 offers an important improvement in the explanatory power of model 1, explaining 49.9% (Nagelkerke R²) of the variation and correctly classifying 40.6% of the early joiners. As expected, this model has a better fit for early joiners than for middle and late joiners given that those are the variables the theory predicts can explain early joining. Nevertheless, models 5 and 6 also represent an improvement if compared to models 3 and 4. While the former explains 39.7% of variation (Nagelkerke R²) and correctly classifies 18.5% of middle joiners, the latter explains 30.4% of variation (Nagelkerke R²) and correctly classifies 3.4% of late joiners.

In model 4, bigger firms are 1.58 times more likely to join early (p<0.01). Still at firm level, performance in social (Exp(B) = 1.039, p<0.01), environment (Exp(B) = 1.018,

p<0.05) and corporate governance (Exp(B) =1.015, p<0.01) issues increase the odds of firms joining early. More stringent labour and business regulations also increase the odds of early joining; in regards to credit market regulations, however, more flexible regulation increases the odds of joining by 1.38 (p<0.01). The presence of counterbalancing voices in society (local NGOs) also contributes to early joining. Country support to the UN is the strongest predictor - support to the relevant UN human rights covenants increases the odds of early joining by 5.74 times (p<0.01).

Model 5 uses middle joiners as the dependent variable. Firm size remains relevant, increasing the odds of joining in this period by 1.417 times (p<0.01). Performance in social issues is also relevant, increasing the odds of joining by 1.054 (p<0.01); environment and governance performance, however is no longer significant. Surprisingly, slack resources contribute to a decrease in odds of joining in this period. Country support to the relevant UN human rights covenants remains the variable with the greatest impact, increasing the odds of joining in the middle period by 4.655 times (p<0.01).

Finally, model 6 uses late joiners as the dependant variable. Firm size increases the odds of late joining by 1.13 times (p<0.05). Social and environmental performance increases the odds of joining in this period by 1.03 and 1.02 (p<0.01 in both cases) but corporate governance was no longer significant. A more stringent labour regulation also increases the odds of joining in this model (Exp(B)=0.79, p<0.01).

Given the multicollinearity concerns between the variables for local and global NGOs, the models were re-run using global NGOs and Local NGOs separately. When using the variable for global NGOs, however, the explanatory power dropped slightly for the three models (Nagelkerke R<sup>2</sup> equals to 40.6%, 15.7% and 3.9% respectively). Given this, the variable for local NGOs participation was retained for future models.

# Models 7, 8 and 9: Variables relevant for late joining

Models 7, 8 and 9 built on models 1, 2 and 3, by adding to them the variables which are, according to the theory, relevant for late joining, namely, mimetic pressures at country and industry levels and regional participation. Differently from expected, however, this set of variables are able to explain early and middle joining better than late joining. Model 7 uses early joiners as a dependant variable - it explains 36.9% of variation (Nagelkerke R<sup>2</sup>) and correctly classifies 21.6% of early participants. Model 9, however, which focuses on late joiners, explains only 14.3% of variation (Nagelkerke

 $R^2$ ) and is only able to correctly classify 0.4% of late joiners. Model 8 also has a poorer fit than model 7, explaining 17.6% of variation (Nagelkerke  $R^2$ ) and correctly classifying 1.1% of middle joiners.

Also different from expected, and counter intuitively, mimetic pressures at country and industry levels have their strongest impact in the early periods rather than late, increasing the odds of early joining by 887.8 times (country) and 3954 times (industry) (model 7) (p<0.01 in both cases). This compares to an increase in odds of 39.688 times in late joining for every unit of increase in peer participation in the same country (p<0.01) and 166.46 times for every unit of increase in peer participation in the same industry (p<0.01) (model 9). Regional participation, also different from expected, is only significant in model 7, increasing the odds of early joining by 1.012 for every unit of increase in the number of UNGC participants at a regional level (p<0.01).

## Models 10, 11 and 12: Variables relevant for both periods

Models 10, 11 and 12 build on models 1, 2 and 3, by adding the variables predicted by theory to increase the odds of joining in both early and late periods concomitantly. These variables represent trade ties with the EU and the number of GRI participants in the firm's home country. While they represent a slight improvement in explanatory power when compared to models 1, 2 and 3 (Nagelkerke R<sup>2</sup>: 13.9%, 10% and 7.4% respectively) they are not able to classify any of the participants correctly, suggesting a poor fit of the model. Interestingly, trade ties with the EU are only significant in later periods, increasing the odds of middle joining by 1.547 (p<0.05) and of late joining by 1.715 (p<0.01). GRI participation in home country, different from expected, reduces the odds of firms joining in the early periods of the initiative (Exp(B)=0.993, p<0.01).

## Models 13, 14 and 15: A complete model

Models 13, 14 and 15 build on all previous models, gathering all the variables for early, late and both periods at the same time. They offer an important improvement in the explanatory power when compared to previous models, with a Nagelkerke R<sup>2</sup> of 58.9%, 41.6% and 34.5% respectively. Model 13 correctly classifies 48.8% of early participants; model 14 correctly classifies 23.6% of middle joiners and model 15 correctly classifies 11.8% of the late joiners.

Still different from expected, mimetic pressures at country and industry levels have their strongest impact in the early periods rather than late, increasing the odds of early joining by 1528 times (country) and 3120 times (industry) (p<0.01 for both) (model 13). This compares to an increase in odds of 35.38 times in late joining for every unit of increase in peer participation in the same country and 70.1 times for every unit of increase in peer participation in the same industry (p<0.01 for both) (model 15). The impact on middle joiners is lower than these two, with increase in odds of 22.3 for every unit of increase of UNGC penetration in country and 44.796 for every unit of increase of UNGC penetration in industry (model 14). GRI aggregated participation at country level, on the other hand, is seen to discourage sign up in early periods of the initiative (Exp(B)=0.984, p<0.01) (model 13) while increasing the odds of joining in later periods by 1.009 times (p<0.05) (model 15). It is not significant half way, though.

Country support to the UN relevant covenants/agreements varies in their impact in sign up across the periods. While they are no longer relevant in later periods of the initiative (model 15), country support to labour instruments is seen to discourage early joining. On the other hand, country support to the UN human rights covenants increase the odds of firms joining the middle periods by 4.693 times (p<0.01).

Firm size looses explanatory power with time – it is significant in early (model 13) and middle (model 14) periods, but not in later periods (model 15). Being a firm in the extractive industry behaves similarly, increasing the odds of joining early by 2.793 (p<0.05) (model 13) and by 2.336 times half way (p<0.05) (model 14); in later periods, however, it is no longer significant. Finally, firms' performance in social issues is seen to increase the odds of joining the initiative in all periods. Corporate governance, however, only contributed for early and late joining (model 13 and 15) and environmental performance only contributed to late joining (model 15).

#### Models 16 and 17: Testing for robustness with a different division of time

In order to test for robustness, two new models were run using the original dependant variables, i.e. earlyvsnever, which took a value of 1 if the firm had joined between 2000 and 2007 and 0 if it had never joined; and latevsnever, which took a value of 1 if the firm had joined between 2008 and 2010 and 0 if it had never joined. The objective was to verify whether the change on the division of time would yield different results on the variables driving early and late adoption.

One can argue that the key findings remain the same. Mimetic pressures are positive and significant in both periods, but have a stronger influence in early joining. A firm is

178.5 times more likely to join early for every unit of increase in peer participation at country level (p<0.01) (model 16) but only 39.4 times more likely to do so in the late period (p<0.01) (model 17). Similarly, a firm is 500.9 times more likely to join early for every unit of increase in participation at its industry globally (p<0.01) (model 16), but only 31.6 times more likely to do so in the late period (p<0.01) (model 17).

Also in line with previous models, economic benefits in the form of trade relations with the EU is only significant in the late period, increasing the odds of a firm joining in this period by 1.7 (p<0.01). Belonging to the extractive industry is only significant in early joining, increasing the odds of joining by 2.7 times (p<0.01) (model 16). Regional participation is still only significant – and with a negative coefficient - at the late period. Finally, more stringent labour regulation and less democratic political environment also have a significant impact on the odds of joining in the late period.

Slight changes are seen in corporate social performance. In line with the previous models, social performance is positive and significant throughout and environment performance remains significant only in the late period, increasing the odds of late joining by 1.01 (p<0.05) times. Corporate governance performance, however, is no longer significant at the late period in this model, although it is still positive. GRI participation in the country is still negative in the early period but no longer significant; it remains, however, positive and significant in the late period, increasing the odds of a firm joining then by 1.006 times (p<0.05). Finally, country support to UN's covenants in labour issues is no longer significant in influencing early joining, but support to the human rights conventions is. The latter is also significant for late joining for these variables.

# Models 18 to 32: Testing for robustness with a different modelling strategy

In order to further test for robustness yet another alternative modelling strategy was tested. This strategy aimed at more specifically reflecting the reality of the timing of the decision making process at each period – early, middle or late. Three new dependent variables were created:

- 1. NewVsOtherwise takes a value of one if the firm joined early (2000 2003) and zero if otherwise, i.e. if it joined in middle or late periods or never joined.
- 2. MiddleVsOtherwise takes a value of one if the firm joined in the middle period (2004-2007) and zero if otherwise, i.e. if it joined in the late period or never joined.

3. LateVsOtherwise – takes a value of one if the firm joined in the late period (2008-2010) and zero if it never joined.

The sampling strategy was also different. For the first set of models (dependent variable being NewVsOtherwise) the full sample was included. For the second set of models (dependent variable being MiddleVsOtherwise) early joiners were excluded and only middle, late or non-joiners were kept. Finally, for late joiners, middle and early joiners were excluded, and only late and non-joiners were used.

By using these dependent variables combined with this sampling strategy, the aim was to reflect the actual reality of the time of the decision-making. More specifically, early joiners are compared to all firms, as all of them arguably had the opportunity to join then. Middle joiners, however, are only compared to late or non-joiners, as those that joined early are no longer going to join in middle or late periods. Similar thinking was applied to late joiners.

Models were run using the same independent variables from models one to fifteen above. Results were not found to be much different. More details are below:

- 1. For the models that had late joining as the dependent variable, no difference was found.
- 2. For the models that had middle joining as the dependent variable: For the second set of models (M5, whose independent variables are only the ones that are relevant for early joining), the following differences were found: *Local NGOs* became significant at 0.1; *ISO 14001 certification* became significant at 0.1 and *Extractive industry* became significant at 0.1.

While three variables became significant, that was not in the full model, and only at 0.1, which is not particularly relevant given the size of the sample used.

3. For the models that had early joining as DV, the following differences were found:

Labour market regulation - became significant at 0.05. While this is an acceptable level of significance, this does not affect the main results because this is a control variable.

Local NGOs - became significant at 0.1. Once again, this level of significance is not relevant given the sample size.

Regional participation - became significant at 0.05. This is the only place where there is a relevant difference when compared to the previous set of models (models one to fifteen). It would not have an important impact on the overall analysis though, as hypothesis eight would still not be supported.

Overall one can then argue that the results obtained with this new modelling strategy are aligned with the previous ones, with no major differences found. The regression tables are not included in the chapter in interest of space, but can be found in annex two.

Further testing for robustness: multinomial logistic regression

In order to further test for robustness another econometric technique was also used: multinomial logistic regression. For that, a new dependent variable was created combining all possible joining timings. This new dependent variable took a value of zero if the firm never joined, one if the firm joined until 2003, two if the firm joined between 2004 and 2007 and three if the firm joined after 2008. The sample used was the same used in models one to 15 in this chapter (i.e. ASSET4's data for the year 2010, comprising a total of 4,580 firms, from 59 countries and 70 different industries) and multinomial logistic regression was used to analyse the data. Multinomial logistic regression offers an interesting alternative as it allows for the analysis of all possible outcomes concomitantly.

The data analysis showed results consistent with the ones observed in models one to 15. Therefore, given that two other tests of robustness had already been reported in full details and consistency was observed, and in the interest of space, full details were not reported here.

# 6.5 Discussing the hypotheses

A discussion on the hypotheses should now follow, and is summarised on the table below. Hypothesis 1 is not supported, as country support to relevant UN covenants/declarations/agreements does not seem to increase the odds of joining in the early phase of adoption of the UNGC. If anything, country support to the UN labour covenants seems to discourage early joining. Hypothesis 2 is also not supported, as the participation of local NGOs is not significant in explaining early

joining. It is only significant in later phases of adoption but then it has a negative coefficient.

Table 23: Discussing the hypotheses

Hypothesis	Status
Hypothesis 1: Firms headquartered in countries whose government demonstrates support to the UN are more likely to join the UNGC early.	Not supported
Hypothesis 2: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. that are UNGC participants) are more likely to join the UNGC early.	Not supported
Hypothesis 3: Larger firms are more likely to join the UNGC early.	Supported
Hypothesis 4: Firms that display higher corporate social performance are more likely to join the UNGC early.	Partially supported
Hypothesis 5: Firms in high impact industries are more likely to join the UNGC early	Supported
Hypothesis 6: Firms with prior ISO14000 certification are more likely to join the UNGC early	Not supported
Hypothesis 7: Mimetic pressures are likely to be stronger in the late period of adoption than in the early days after the launch of the UNGC.	Not supported
Hypothesis 8: Geographic proximity is an important predictor of sign up to the UNGC in the late period of adoption.	Not supported
Hypothesis 9: Firms in trade proximity with the EU are equally likely to join the UNGC in the early or late periods.	Partially supported
Hypothesis 10: Firms headquartered in countries with a high number of GRI participants are equally likely to join the UNGC in the early and late periods.	Partially supported

Hypothesis 3 is supported. Firm size is associated with increasing odds of joining in early stages of adoption — a firm is 1.593 times more likely to join in early days for every unit of increase in firm size. This is reduced to 1.4 in the middle period, and size becomes non-significant in leading to late adoption. Hypothesis 4 is partially supported. Social and governance performance are indeed positive and significant in early periods, increasing the odds of firms joining early. However, environment performance is not significant at this stage. On the other hand, all three areas of performance contribute to increasing odds of joining in the later phase of adoption. In addition, while the coefficients are slightly higher in the early phase, they are not much higher, therefore not suggesting a much larger impact in the earlier phase of adoption.

Hypothesis 5 is supported, as belonging to an extractive industry is positive and significant in the early phase of adoption, positive and significant but with a slightly lower coefficient for middle joiners and non-significant for late joiners. Hypothesis 6,

on the other hand, is not supported, as prior ISO14001 certification is not significant in any period of adoption.

Hypothesis 7 is not supported, as mimetic pressures in the form of peer participation in the UNGC at country and industry levels are not only significant but also stronger in the early periods of the initiative (rather than in the later period as predicted). Geographic proximity, on the other hand, is only significant in the late period; however, it is associated with a drop in the odds of joining, therefore hypothesis 8 is also not supported.

The study also found partial support to hypothesis 9, as while trade proximity with the EU is not relevant in driving early joining, it does increase the odds of joining in the late period. Finally, hypothesis 10 is only partially supported. While the number of GRI participants in a country is associated with increasing odds of a firm joining in late periods, it is linked to a decrease in odds of sign up in the early days of the UNGC.

# 6.6 Discussion and Conclusion

While we have learned valuable information in chapter four about drivers for firms' decision to join the UNGC, chapter five showed that factors moderating firms' decision to join the initiative vary along the different phases of implementation of the UNGC. In other words, early joiners are driven to some extent by a different set of institutional pressures, if compared to later joiners. For one thing, size has its highest impact on firms' odds of joining in the early period. This impact is reduced in the middle phase, and becomes not significant in the late period. This suggests that bigger firms tend to join early, with smaller firms tending to follow later in the process.

Equally, belonging to the extractive industry increases the odds of a firm joining by 2.793 times in the early period. This impact is slightly reduced in the middle period and in the late period this factor becomes not significant. It can be argued that these firms, which are normally under greater legitimacy threat due to the nature of their activities and as a result under greater pressure to display consonance with societal interests, are more inclined to join early to show commitment.

In general, firms with a good corporate social performance story to tell will tend to join the UNGC in all periods. Small variations, however, can be observed. Firms' corporate social performance in regards to social issues was relevant in all periods, even though its importance decreases slightly in the later period. Good performance

in corporate governance also has a slightly higher influence in the early period. Better environmental performance, however, only impacts the odds of joining in the late period. Being ISO14001 certified, on the other hand, was not associated with increasing odds of joining in any period.

Different from expected, however, increasing levels of peers sign up to the UNGC within the firms' industry and country has an important impact on early joining, more so than in later periods. This is counter intuitive and almost by definition not possible according to the theory – one would expect that these pressures would be stronger in later periods, when participation becomes more of a requirement than a choice. It may be, however, that in early periods uncertainty in relation to benefits of participation is at its peak as the initiative is still being established. Therefore for every new peer that joins, a little of this uncertainty fades away, and a firm is therefore more likely to join. One could then argue that the impact of peer participation would be at the highest in this period because that is when the highest levels of uncertainty in regards to the benefits (and risks) of joining exist. Another possible explanation, when understanding the results as a whole, is that the initial group of firms that join (bigger firms, with higher levels of CSP) are actually a "small club" at a global level. Therefore, an increase in levels of sign up amongst those firms will tend to have a greater impact in the decision of other firms in this small circle to join (if compared to peer pressure amongst a much larger group of firms nationally or globally). Geographic proximity or the diffusion effect expected from high levels of UNGC sign up in neighbouring countries, however, is only significant in the later period and then it is associated with lower odds of joining.

Diffusion through trade relations, on the other hand, is only significant in the late period. Only for late joiners economic benefits in the form of trade relations with the EU are shown to significantly increase the odds of joining. It can be argued that in later stages the initiative has acquired the legitimacy and recognition it needed to be used as a commercial tool at a global level. This diffusion through trade could happen in this stage, for example, through big firms requirements to small firms located abroad that are part of its supply chain.

At a national level, country support to the relevant UN Conventions/agreements was not confirmed to support early joining. Support to the UN's labour conventions/agreements was actually associated with lower odds of early joining. Still at the national level, lower levels of democracy and more stringent labour regulation were associated with increasing odds of joining in later periods.

Normative forces in the form of concentration of NGOs in firms' home country were not associated with increasing odds of early joining; they were actually associated with decreasing odds of joining in the late stage of the UNGC. Given that these NGOs are directly engaged in the UNGC as participants, it may be that this close proximity may shy away firms that are not ready to engage in a closer dialogue with these counterbalancing voices; this may be especially true for firms inclined to ceremonial commitment.

The study also showed that while a higher number of GRI participants in a country was associated with higher odds of joining the UNGC in the late period, this actually reduced the odds of firms joining in the early period. In other words, firms in countries with more GRI participants were less likely to join the UNGC in its first years of existence. It may be that in the early days of the UNGC the synergies between these initiatives were not yet clear, potentially leading to a perception that the two initiatives were exclusionary with a sense of "why do I need to join the UNGC when I am implementing the GRI?". While the two initiatives first announced a collaboration in December 2001, i.e. in the very early days of the UNGC, this cooperation was strengthened with time (UNGC, 2003) - For one thing the UNGC-GRI Value platform was only launched in 2006 (UNGC, 2007). It is possible that only with the maturing of this collaboration, external stakeholders were able to fully understand the existing synergies. In addition, professionals working on the implementation of the GRI might have been a bit protective in the early days of the market of implementing the GRI and therefore this might be also contributing for the fact that GRI participation in a country is discouraging early joining. In later periods, however, synergy between the initiatives was probably much clearer to firms and other stakeholders, and professionals might actually have started to work with them together.

In a nutshell, one can argue that early joiners in the UNGC are bigger firms, with a good corporate social performance story to tell and with higher legitimacy threats due to being from an extractive industry. Early joiners are also highly susceptible to mimetic forces in the form of peer participation. Late joiners, on the other hand, show concern with the economic benefits of participation. Size and inherent impact are no longer significant for those firms, but a good story to tell in all areas of corporate social performance is driving late adoption. Peer sign up remains an important mimetic pressure. Also, late joiners are firms from countries with more stringent labour legislation and less democratic governments, where local NGO participation in the UNGC discourages sign up to the initiative.

The two-stage model: does it fit the UNGC diffusion pattern?

Tolbert and Zucker's (1983) two-stage model proposed that motivations may drive different speeds of adoption, as while early adopters focus on technical benefits from adoption, late adopters are more concerned about ensuring their legitimacy. Neo-institutional theory reinforces this idea saying that while those interested in improving performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008) will tend to join early, as the institutionalisation of a practice progresses, the decision to adopt it becomes more of a requirement than a choice. This two-stage model cannot be confirmed in this study.

For one thing, increasing levels of peers sign up to the UNGC within the firms' industry and country has an important impact on early joining, more so than in later periods. This is counter intuitive and almost by definition not possible according to the theory – one would expect that these pressures would be stronger in later periods, when participation becomes more of a requirement than a choice. On the other hand, economic benefits in the form of trade relations with the EU - which can arguably be a more instrumental motivation for joining - are only significant in the late period. They are not relevant in the early period, as one would expect.

This is in line, however, with Arevalo et al's (2013) findings for the adoption of the UNGC in the Spanish context. The authors propose that early UNGC adopters in Spain were mainly focused on image gains, rather than economic gains. The authors defend that, being a UN initiative, the UNGC has, from its inception, been widely known and therefore firms would immediately see an image gain by associating themselves with the initiative. Also, they add, a business case for participation was not discussed in the early days. Therefore, it was only among late adopters that economic benefits interest emerged, while still keeping an interest in image gains (Arevalo et al., 2013). This argument also finds resonance at the global level, in that by being an UN initiative, the UNGC has arguably inherently acquired from the early days the legitimacy associated with this institution. In addition, given the reach of the UN globally, it was arguably quicker for this initiative to become known for firms worldwide, if compared to initiatives flying solo.

The nature of the diffusion process, therefore, arguably varies in different phases. In early periods, geographic proximity plays a key role - mimetic pressures amongst peers both at country and industry levels have a crucial impact in increasing the odds of more firms joining the initiative. Even though firms in the same industry are not

necessarily in the same country or region, the type of contagious process of diffusion that may occur within industry is somewhat similar to that of firms in close proximity, as in many ways they share a space; among the types of nature of diffusion (geography, trade and culture) geography would be the closest representation of this effect. In later periods however, while this remains an important force, it is clear that proximity through trade – especially bigger firms influencing their supply chain – is also a very important mean of diffusion.

# 6.7 Contributions to theory and practice

Most research on the speed of adoption of new practices focuses on innovation. Where it looks into voluntary CSR initiatives, it mostly focuses on the diffusion of ISO14001 (Delmas and Toffel, 2008, Delmas and Montes-Sancho, 2011). This study contributes to the literature by providing an empirical verification of drivers for adoption at different stages of a voluntary CSR initiative that is non-certifiable – the UNGC. To the author's best knowledge, there was only one study on the UNGC that looked into speed of adoption (Arevalo et al., 2013). The study, however, was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption.

To practitioners, the information of the general profile of early joiners, combined with the evidence from both chapter four and this chapter of the relevance of peer participation to attract more participants is relevant in that by targeting the right participants in the early days, voluntary CSR initiatives are in a better position to grow its base of participants as time progresses. In addition, empirical evidence of the important impact of peer participation in firms' decision to join the initiative especially in the early days suggests that the establishment of partnerships with industry organisations, for example, or initiatives at the country level such as the UNGC local networks, can be valuable strategies to help a new initiative to take off. In later periods, however, the relevance of economic benefits in driving sign up shows that strategies such as working with champions can be very valuable to ensure continuous growth. For example, by incentivising larger firms that are well involved in the initiative to promote the UNGC across its supply chain may bring a number of new participants to the initiative.

# 6.8 Summary and next chapter

This chapter aimed at understanding the differences in drivers for adoption of the UNGC over the different phases of the initiative. The study shows that drivers for

adoption vary across time, depending on where the initiative is in the process of institutionalisation. Empirical evidence suggests that early joiners in the UNGC are bigger firms, with a good corporate social performance story to tell and higher legitimacy threats due to being from an extractive industry. Early joiners are also highly susceptible to mimetic forces in the form of peer participation. Late joiners, on the other hand, show concern with the economic benefits of participation. Size and inherent impact are no longer significant for those firms, but a good story to tell in all areas of corporate social performance is also driving late adoption. Peer participation remains an important mimetic pressure. Also, late joiners are firms from countries with more stringent labour legislation and less democratic governments.

The diffusion process of the UNGC does not seem to follow the classic two-stages model proposed by Tolbert and Zucker (1983). One can observe a stronger role for mimetic pressures in driving early than late adoption, and the focus on economic benefits (in the form of trade relations) only emerging as significant in the late period of adoption. While this is different from theory, this is in line with Arevalo et al's (2013) findings for the adoption of the UNGC in the Spanish context, where only amongst late adopters interest in economic benefits emerged as a driver for joining.

The next chapter will move beyond the decision to become a UNGC participant, to look into firms' performance in the initiative. More specifically, it will look into the extent to which institutional pressures shape UNGC's participants' performance in the initiative's principles and issue areas.

# 7 Chapter 6: Under what conditions are promises more likely to be delivered upon? Drivers for firm performance in the UNGC

Participation in voluntary CSR initiatives has grown over the last decades (Waddock, 2008) and with it interest from practitioners and scholars alike on the matter of firm performance following sign up. For one thing, great variation on performance is observable across UNGC participants. Although firms are subject to the same commitment, performance following becoming a UNGC participant varies greatly, with some firms displaying best practices while others are expelled due to failure to communicate on progress. For one thing, as of 2 November 2013 4,199 firms had been expelled from the UNGC for failure to communicate on progress. Given that in the same period the UNGC had 7,868 corporate participants, this is a significant number representing over 50% of the accumulated number of participants, and suggesting that participants vary in performance and level of commitment.

While firms' choice on level of engagement in an initiative lies within the organisation itself, a number of institutional forces are proposed to influence this decision. Building on the emerging discussion on institutional influences on other aspects of corporate social performance (Campbell, 2007, Matten and Moon, 2008, Jeurissen, 2004, Gjolberg, 2009), this study aims at exploring the factors that may influence firm's performance in voluntary CSR initiatives in general and in the UNGC in particular, at firm, industry and country levels. Following a more recent line of study on decoupling (Kim and Lyon, 2012), it aims at understanding the conditions under which symbolic engagement in the UNGC is appealing for firms, and conversely circumstances under which substantive engagement is of more interest.

As discussed in chapter two (section 3.3.1), not all firms resort to the seemingly very profitable strategy of decoupling, suggesting that "symbolic management is useful for some firms under certain circumstances, but not for all firms nor in all circumstances" (Kim and Lyon, 2012: 01). One can argue, therefore, that an institutional environment that can increase the external costs of decoupling by increasing the risks of firms being caught and penalised, are likely to lead to a reduction in symbolic commitment. As explained in detail in section 3.3.2, elements that may influence the cost of decoupling are proposed to be multilevel, in other words, "what they talk about me matters to my behaviour", in the form of stakeholder pressure and scrutiny of some

guise, as well as "where I come from", represented by firms' home country institutional environment, and "who I am", represented by firm attributes such as size and industry. These factors may make it more or less interesting for firms to keep a promise.

Despite great interest on firm performance after joining voluntary CSR initiatives and on institutional influences on other aspects of corporate social performance (Campbell, 2007, Matten and Moon, 2008, Jeurissen, 2004, Gjolberg, 2009), the literature on institutional influences on firm performance on voluntary CSR initiatives was found to be incipient (Knudsen, 2011). Articles exploring firms' corporate social performance after joining a voluntary CSR initiative are mainly focused on the impact the initiative itself may have on firm behaviour (Boiral and Henri, 2012, Yin and Schmeidler, 2009, Potoski and Prakash, 2005b). Very few articles have looked beyond the immediate impact of the initiative to understand the extent to which the characteristics of the firm, industry or of its operating environment may influence their performance (Knudsen, 2011, Perez-Batres et al., 2012a).

While there seems to be some agreement in regards to the relevance of stakeholder pressure and scrutiny in different guises in improving performance, the small number of studies, different focus, idiosyncratic methods and diverse choice of variables make it challenging to make conclusions and leave guestions open in regards to the drivers for performance for firms that have joined these initiatives in general and the UNGC in particular. In addition, specifically in the case of studies including the UNGC, while there seems to be a good measure of ceremonial commitment with the use of delisting (Knudsen, 2011, Lim and Tsutsui, 2012) measures of good or substantive performance show room for further development. Some studies resorted to the use of GRI as a measure of substantive commitment in contrast with the choice of UNGC as ceremonial or symbolic commitment (Lim and Tsutsui, 2012, Perez-Batres et al., 2012a). This arguably does not allow for a measure of performance in the UNGC that can be used against institutional measures to understand their impact. This study aims at contributing to fill this gap, with a crossnational, multi-industry, longitudinal study of institutional influences on UNGC participants' performance in the initiative's issue areas, as well as in three compound measures of corporate social, environment and governance performance.

# 7.1 Understanding institutional influences in firm behaviour in voluntary CSR initiatives

Institutional theory predicts that regulative, normative and cognitive aspects of firms' institutional environment will influence firms' decision to implement a certain organisational practice (Scott, 2008). Institutions establish what is considered appropriate behaviour through explicit rules and procedures, as well as through principles and norms implicit in daily activities (Bernhagen et al., 2012). Firms will aim to conform (DiMaggio and Powell, 1983) to the dominant practices within their operating environment in order to obtain legitimacy and ultimately ensure its survival in the long run (Scott, 2008). This will lead to increasingly homogenous behaviour, as firms strive to "fit-in" and conform to expectations and requirements. Oliver (1991) suggests, however, that conforming is not the only available choice for an organisation faced with institutional pressures. Possible responses may range from acquiesce, to compromise, avoidance, defiance and manipulation (Oliver, 1991). Organisations' willingness, capacity and ability to conform will drive their response to the institutional demands (ibid).

In the context of this debate between structure and agency, it is proposed here that while firms' choice of substantive or ceremonial engagement after joining an initiative lies within the organisation itself, a number of institutional pressures may influence this decision. As argued in section 3.3.2, firms' operating environment may offer different incentives and threats for certain behaviour. These variations will arguably influence the external cost of decoupling, i.e. the risks associated with increasing scrutiny revealing discrepancy between firm's discourse and action (Kim and Lyon, 2012). This is likely to lead to conditions that are more or less conducive for decoupling – the higher the external cost, the less interesting it may be for firms to engage in ceremonial behaviour, and vice versa. A number of factors have been proposed to influence firms' decision to make a substantive or ceremonial commitment to a voluntary CSR initiative. The table below provides a summary and examples of these factors, at which levels they can be observed and some examples from the literature. These factors will be explored in more detail in relation to the theory.

Figure 6: Elements impacting level of commitment

Туре	Level	Some examples in the literature
Size	Firm	Firm size(Knudsen, 2011), facility/unit size (Potoski and Prakash, 2005b, Rivera et al., 2006, Bernhagen and Mitchell, 2010)
Slack resources	Firm	Slack resources (Perez- Batres et al., 2012a)
Industry/level of impact	Industry	Level of pollution, level of impact (Knudsen, 2011, Bernhagen and Mitchell, 2010, Perez-Batres et al., 2012a)
Stakeholder pressure / scrutiny	Firm, industry and country	NGOs pressure (Lim and Tsutsui, 2012), workers pressure, public perception, stakeholder scrutiny (Perez-Batres et al., 2012a), parent company pressure, senior management / board pressure (Annandale et al., 2004)
Market pressure / economic interdependence	Firm, country	Customers / clients pressure (Annandale et al., 2004, Christmann and Taylor, 2006), bilateral export context (Lim and Tsutsui, 2012), competitors, economic interdependence (Knudsen, 2011)
Domestic governance elements	Country	Democracy (Lim and Tsutsui, 2012), regulatory pressure (Annandale et al., 2004), domestic governance (Knudsen, 2011), neoliberal economic policies (Lim and Tsutsui, 2012)
Government endorsement	Country	Launch of UNGC in country (Lim and Tsutsui, 2012)

# 7.1.1 Stakeholder pressure / scrutiny

Firms are generally faced with pressures from a number of different stakeholders – customers, clients, governments, civil society, academia, workers, among others. Given the variety of interests, priorities and perspectives among them, it is only natural to expect that firms may often be faced with competing sovereigns, or conflicting demands from different stakeholders. In addition, stakeholder pressure and scrutiny may take a number of different forms and be built on different institutional pillars. For example, pressure from regulators is generally associated

with coercive mechanisms, while normative pressures are often associated with professionalisation or with civil society.

As explained in section 2.1.3.2, the normative pressures help define goals and objectives (for example: making a profit) while also defining what constitutes appropriate means to pursue them (for example: sustainable business practices) (Scott, 2008). While normative pressures have typically been associated with professionalisation (DiMaggio and Powell, 1983), the latter is not the only source of this type of pressures. The community, in the form of non-governmental organisations (NGOs), may also exercise pressure over firms to adopt a certain practice (Delmas and Montes-Sancho, 2011).

NGOs have gained prominence over the last decades and have been an important voice in seeking to define new roles and responsibilities for businesses (Perez-Batres et al., 2011). In line with Perez-Bastres et al (2011) NGOs are classified here as a normative force in shaping firm behaviour in regards to CSP in general, and voluntary CSR initiatives in particular. In reason with this argument, one would expect that countries with strong NGOs' presence and an environment which allows them to express themselves (Perkins and Neumayer, 2010), is likely to display strong normative pressures on firms to show higher corporate social performance. In their constant seek for legitimacy firms in this environment will arguably have more incentives to try to improve performance in consonance with commitments made.

More specifically in the case of the UNGC, NGOs have been an integral part of the initiative since its foundation (UNGC, 2013a). As of November 2013, over 2,000 civil society organisations were listed as UNGC participants (UNGC, 2013a). NGOs engaged with the UNGC are arguably likely to display particular interest in the initiative and on participating firms' performance post-joining, and therefore will arguably be more likely to exert pressure on firms to make a substantive commitment to implementation. However, studies on other aspects of voluntary CSR initiatives have pointed to some discrepancies in regards to the effects of NGOs' pressure. For example, while Perez-Bastres et al (Perez-Batres et al., 2011) found that NGO participation in the UNGC in a country is not significantly related to the likelihood of firm engagement in the initiative, Berrone et al (2013) found that normative pressures from NGOs have a positive and significant effect on firms' efforts to engage in environmental innovation. These contrasting findings suggest that NGOs' pressure may indeed have varied levels of impact, and therefore it is important to test the following hypothesis:

Hypothesis 01: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. that are UNGC participants) will be more likely to display higher performance in the UNGC issues.

It has been proposed in the literature, however, that the association between NGOs' pressure and level of commitment may not be always straightforward (Lim and Tsutsui, 2012). For one thing, Lim and Tsutsui (2012) demonstrated that while in developing countries pressures from international NGOs remained positively and significantly associated with substantial commitment to the initiative, in developed countries those pressures were positively associated with ceremonial commitment to the UNGC (i.e. delisting). This may be related to the authors' choice of proxy for substantive commitment (participation in the GRI), which is different from the focus of ceremonial commitment (delisting from the UNGC). The fact that they cover different initiatives may impose a limitation on the analysis. In any case, it is important to understand whether the level of economic development may moderate performance. It is therefore hypothesised that:

Hypothesis 02: Firms headquartered in developed countries will be more likely to display higher performance in the UNGC issues.

These pressures may also come from internal stakeholders. Annandale et al (2004) found that pressure from the parent company, from senior management or from the board to be important influences on firms' environmental performance. While the authors do not offer a theoretical explanation for this finding, one could argue that those internal stakeholders are in a position where they can exert coercive pressures on firms to conform to commitments made, in order to protect the firm's reputation and ultimately legitimacy. Therefore, where those internal pressures are strong, one can arguably expect to observe more substantial implementation of the commitments made.

Hypothesis 03: Firms with a more diverse board are more likely to display higher performance in the UNGC issues.

# 7.1.2 Peer pressure and mimicking behaviour

DiMaggio and Powell (1983) highlight that coercive authority is not the only source of institutional isomorphism – uncertainty is also a powerful force in encouraging organisational behaviour towards isomorphism. When there is uncertainty in the

environment, organisations may be encouraged to mimic the behaviour of other organisations perceived by them as successful (and therefore legitimate), in order to ensure their own legitimacy (DiMaggio and Powell, 1983, Haunschild and Miner, 1997). This mimicking behaviour may occur in unconscious ways, through which certain practices or structures that are frequently adopted start to be "taken for granted" and embraced without thinking (Haunschild and Miner, 1997).

Building on this, one can argue that the performance of peers, i.e. the performance of other firms within the focal firm's home country or industry, may influence the focal firm's performance. Firms may find themselves compelled to adopt similar practices – and arguably level of performance – of peers. These "modelled organisations" (DiMaggio and Powell, 1983) may be seen as offering interesting solutions for problems whose outcomes are difficult to predict (Perez-Batres et al., 2011). If peers are displaying higher performance in a certain issue or principle, the focal firm is arguably going to tend to mimic that behaviour. It is therefore hypothesised that:

Hypothesis 04: Firms are more likely to display higher performance in an UNGC issue if other firms in its home country are also performing high in that issue.

Hypothesis 05: Firms are more likely to display higher performance in an UNGC issue if other firms in its industry are also performing high in that issue.

## 7.1.3 Economic interdependence and market pressures

Trade relations have also been pointed as having an important impact on firm behaviour in regards to CSP. While coercive power is generally associated with the state, firms are also an important source of coercive isomorphism (Delmas and Montes-Sancho, 2011), and this pressure can become evident in trade relations, notably in the case of firms located in different countries. DiMaggio and Powell (1983: 150) proposed that "coercive isomorphism results from both formal and informal pressures exerted on organisations by other organisations upon which they are dependant". In trade relations there is arguably an imbalance of power, where sellers will seek to ensure contracts with buyers who would have a pool of sellers to choose from. Buyers may require suppliers to adopt standards that are widely implemented in the buyer's country (Perkins and Neumayer, 2010), often to protect their own legitimacy.

Where information asymmetry exists and it is difficult to measure performance, there may be greater incentives for ceremonial behaviour as misbehaviour may be more easily concealed (Christmann and Taylor, 2006). In those cases, clients may use coercive power and impose requirements and/or mechanisms of monitoring and control to ensure substantive implementation on their supply chain (Christmann and Taylor, 2006). In a study of ISO9000 certified facilities in China, Christmann and Taylor (2006) found support for this proposition. Their results showed that the higher the frequency of customer monitoring, the more likely suppliers are to substantively implement a voluntary CSR standard. Lim and Tsutsui (2012) propose that firms on long-term trade relations are generally more able to implement broader screening processes and are better placed to monitor their partners (Lim and Tsutsui, 2012), therefore, being more likely to ensure significant commitment and improved performance (Christmann and Taylor, 2006). Authors have used Foreign Direct Investment (FDI) as a proxy to long-term trade relation (Lim and Tsutsui, 2012), therefore it is proposed that:

Hypothesis 06: Firms headquartered in countries with high FDI are more likely to display higher performance in the UNGC issues.

Still on market and economic interdependence, it has been proposed that firms operating in countries where social and environmental legislation is non-existent or poorly enforced will face greater challenges to manage those issues and secure its legitimacy (Knudsen, 2011). Given the bigger threat to their legitimacy, these firms will have greater incentives to manage their social and environmental issues, and as a result, arguably display a substantive commitment to voluntary initiatives they choose to join. For one thing, Knudsen (2011) found that the more internationalised the national economy of a firm's home country (measured as outward FDI/GDP) the less likely the firm is to be delisted, i.e. the lesser the likelihood that the firm will display mere ceremonial commitment to the UNGC. Building on this, it is proposed that:

Hypothesis 07: Firms that are highly internationalised are more likely to display higher performance in the UNGC issues.

# 7.1.4 Domestic governance elements

Governance can be defined as "the traditions and institutions by which authority in a country is exercised" (Kaufmann et al., 2009: 5). The political system, or the state, is often associated with the regulative pillar with its coercive mechanisms (Berrone et

al., 2013, Delmas and Montes-Sancho, 2011). States may influence organisational behaviour and adoption of practices by providing incentives or implementing sanctions (Delmas and Montes-Sancho, 2011). Greater acquiescence with regulations, rules and laws can offer the organisation some protection from political risks (in the form of closer monitoring, for example) and legal coercion (in the form of more stringent regulation or enforcement of existing regulations) (Berrone et al., 2013). Through these lenses, the role of different elements of domestic governance ought to be explored.

Kaufmann et al (2009) propose six dimensions of domestic governance, namely: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Together they are proposed to represent the institutional framework through which authority is exercised in a particular country (Kaufmann et al., 2009). It is proposed that good domestic governance institutions will be associated with substantive commitment to voluntary CSR initiatives (Knudsen, 2011). It can be argued that strong domestic governance can create the conditions to hold firms' accountable for the commitments they make, therefore leading to substantive implementation of voluntary CSR standards.

Hypothesis 08: Firms headquartered in countries with good domestic governance are more likely to display higher performance in the UNGC issues.

In a similar line, home country levels of democracy have also been pointed in the literature as a potential influence on firms' engagement in CSR initiatives (Lim and Tsutsui, 2012). Governments in countries that display a more democratic political system usually demonstrate concern for and engagement with a wider set of societal interests (Bennie et al., 2007, Perkins and Neumayer, 2010). Equally, more democratic countries normally outperform less democratic peers in a number of welfare areas, including the issue areas of the UNGC – prevention of human rights violations, as well as control of pollution and corruption (Bennie et al., 2007) and are more prepared to listen to critical voices in society, including in regards to corporate behaviour (Perkins and Neumayer, 2010, Bernhagen et al., 2012). Therefore, it is proposed that firms under the realm of more democratic governments will be under greater pressure (actual or perceived) and therefore have greater incentives to incorporate a larger number of welfare concerns into its daily business, including in regards to the issues proposed in voluntary CSR initiatives. For one thing, Lim and

Tsutsui (2012) found democracy to discourage ceremonial commitment to voluntary CSR initiatives in developed countries and encourage substantive commitment in developing countries. It is therefore proposed that:

Hypothesis 09: Firms headquartered in countries with a more democratic political system are more likely to display higher performance in the UNGC issues.

Finally, it has been proposed that more liberal national economies are likely to see a rise in the popularity of voluntary CSR initiatives, given their logic of lower levels of regulation (Lim and Tsutsui, 2012). Firms in those countries will see an opportunity to work with policymakers to develop such initiatives and frameworks, avoiding government regulations while deflecting criticism and ultimately protecting their legitimacy (Lim and Tsutsui, 2012). While this economic orientation may be associated with higher levels of sign up to voluntary CSR initiatives, no evidence was found that it might be associated with higher performance as well. Lim and Tsutsui (2012) actually found neoliberal economic policies to be positively and significantly associated with ceremonial commitment to voluntary CSR initiatives in developed countries. Ultimately, one could argue that the underlying argument here is one of mirroring (Jackson and Apostolakou, 2010) - lower levels of government intervention are likely to lead to poorer CSP, and also in some cases ceremonial commitment to voluntary CSR initiatives. Similarly, Annandale et al (2004) found regulatory pressure to be an important driver for firm environmental performance.

Hypothesis 10: Firms headquartered in countries with more stringent regulation are more likely to display higher performance in the UNGC issues.

# 7.1.5 Government support

Finally, government support to the initiative has been pointed as having a potential impact on firm performance post-joining. If a government is sympathetic to an initiative or has dedicated resources to support its development, it may, for example, provide firms with incentives to join or threaten non-participants (Delmas and Montes-Sancho, 2011). Using the launch of the UNGC in a country (through the launch of a local network) as a proxy for government's support to the initiative, Lim and Tsutsui (2012) found, however, that in developing countries this endorsement may lead firms that do not have the capacity to submit reports to join the initiative. In developed countries, while UNGC launch increased sign up, there was no evidence that this was associated with improved performance. The authors conclude that

UNGC launch only seems to encourage a shallow commitment to the initiative (Lim and Tsutsui, 2012).

Hypothesis 11: UNGC network launch in firm's home country is not associated with higher performance in the UNGC issues.

# 7.1.6 Industry

Belonging to high impact industries has been found in the literature to influence corporate social performance. Firms in those industries are likely to face higher stakeholder scrutiny and therefore be under greater pressure to display alignment with societal expectations (Perez-Batres et al., 2012a, Bansal and Bogner, 2002), facing real losses if their customers or other stakeholders pull back support for them due to poor (real or perceived) sustainability performance (Bansal and Bogner, 2002). These firms, therefore, find their legitimacy to be more at risk, as well as their economic interests, and as a result, have greater incentives to engage in voluntary CSR initiatives to signal to stakeholders their commitment and willingness to address such issues. As argued in section 3.3.2.4, firms in high impact industries, consequently, may find greater incentives to display substantive commitment to voluntary CSR initiatives — or perceive greater risk of sanctions if behaving otherwise.

Firms in high impact industries may be subject to different types of pressures. They may need to respond to normative calls from relevant stakeholders to adhere to sustainability standards (Perez-Batres et al., 2012a). In like manner, they may be subject to more coercive forces. For example, their customers may find fit to require an environmental management certification in order to protect their own reputation, being able to show efforts to make dealings with "environmentally minded" suppliers (Bansal and Bogner, 2002). Customers and clients may also control performance through audits, visits, among other tools. Finally, firms operating in the same industry are exposed to similar challenges and therefore are likely to develop similar CSR activities (Knudsen, 2011). In view of these arguments, it is proposed that:

Hypothesis 12: Firms in high impact industries are more likely to display higher performance in the UNGC issues.

#### **7.1.7** Firm size

As reviewed in section 3.3.2.3, studies have found size to be a relevant predictor for firm behaviour in regards to CSP (Bennie et al., 2007, Bernhagen and Mitchell, 2010). For example, in a study of UNGC participants, Knudsen (2011) found that small and

medium sized firms were more likely than larger firms to be delisted from the initiative due to failure to communicate on progress. Explanations behind the effect of size have been linked to all of the three pillars. DiMaggio and Powell (1983) have theorised that organisations that are larger in size are likely to be subject to greater pressure for mimetic isomorphism. The authors propose that the larger the personnel or customer base of an organisation, the greater the pressure on it to demonstrate that it is offering programs and services similar to those provided by other organisations; i.e. a larger size may encourage mimetic isomorphism (DiMaggio and Powell, 1983).

Authors have also proposed that larger firms are more likely to be subject to regulatory pressures, for example in the form of higher inspection frequency by regulatory authorities (Johnstone and Labonne, 2009). As a result, larger firms will have greater incentives to signal good behaviour to regulators. Finally, normative pressures from NGOs and other social actors for higher CSP are also likely to be more often directed at larger firms. Baker (2010) discusses the fact that big international firms are more likely to receive strong criticism under crisis than small companies. Following this reasoning, it is expected that larger firms, which are more likely to have their legitimacy put at risk, also have the highest incentive to proactively signal good performance to stakeholders.

Despite the variations in focus, the argument is ultimately similar throughout: the larger the organisation, the more visible are its actions and therefore more attention and more scrutiny it is likely to receive from stakeholders (Johnstone and Labonne, 2009, Knudsen, 2011, Schembera, 2012). As result of that, larger firms are likely to be under greater pressure to conform to society's expectations and demands, and therefore more likely to respond to such pressures in order to enhance its legitimacy (DiMaggio and Powell, 1983). Building on this argument, it is proposed that larger size is likely to be associated with higher levels of performance post-adoption of a voluntary CSR initiative.

Hypothesis 13: Larger firms are more likely to display higher performance in the UNGC issues.

# 7.1.8 Control variables

#### 7.1.8.1 Slack resources

Slack resources have been found to have an impact on firms' decision to engage in various elements of CSP (Levy and Shatto, 1978, Melnyk et al., 2003, Perez-Batres

et al., 2012a, Waddock and Graves, 1997). As explained in section 3.3.2.3, the argument for the relevance of this element is that financial resources are essential to allow firms to engage in new endeavours or routines, as they provide firms with the discretion for decision making that a lack of resources would otherwise prevent (Perez-Batres et al., 2012a, McGuire et al., 1988). One could argue that implementing new processes and activities requires resources, especially where firms need to implement significant change to current practices. Therefore, an organisation that disposes of slack resources will be better placed to substantively implement the principles they signed up for.

#### 7.1.8.2 Time as a participant

Time as a participant reflects how long a firm has been a UNGC participant. Through learning events, dialogue and partnership projects, the UNGC aims at engaging participants in the discussion, development and implementation of solutions to sustainability challenges, as well as in the sharing of best practices (Rasche, 2009a). It is therefore expected that firms that have been participants for longer have been exposed longer to these learning opportunities and therefore are likely to display higher performance in the UNGC issues.

#### 7.1.8.3 Previous performance

Controlling for effects of firms' previous performance is an important element of understanding current performance. One can argue that what the firm did the year before will have an important impact on what the firm is currently doing - for example, if the firm gave a substantial amount of money to charity in the previous year, it is unlikely that it will reduce this amount drastically in the current year. Similarly, if the firm had a policy on forced labour the year before, it is most likely that it will still have it in the current year. Therefore, it is expected that past higher performers will also perform higher in the current period.

# **7.2** *Data*

This study uses data provided by ThomsonReuters ASSET4, combined with institutional data provided by a number of publicly available sources (see below and chapter three for a full list and description) as well as some UNGC data on participation and firm level data provided by Datastream.

# **7.2.1 Sample**

This study focuses on a subset of the ASSET4 data. More specifically, it uses only firms that were UNGC participants at some point between 2002 and 2011 (UNGCMEMBERCURRENTYEAR=1). This comprises a total of 3.180 observations in the period, distributed as shown on the table below:

Table 24: Sample - total number of observations

UNGCMEMCURRYR \* YEAR Crosstabulation

	YEAR										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
UNGCMEMCURRY 1 R	69	110	180	228	269	332	428	491	601	472	3180
Total	69	110	180	228	269	332	428	491	601	472	3180

The sample includes a total of 707 firms from 42 different countries and 57 industries.

# 7.2.2 Dependent variables

The dependent variables were chosen to cover the four issue areas of the UNGC, and the 10 principles. In addition, guided by Wood's (1991a) definition of CSP, variables were chosen to demonstrate whether firms had policies in place stating their principles in regards to an issue and processes in place to implement those principles. Outcomes other than the existence of policies were more challenging to have as a dependent variable, as often there were not a sufficient number of observations to allow for those variables to be used. Where possible, however, extra outcome dependent variables were added.

The year 2002 is the initial year as this is the first year of data available in ASSET4. While it would have been ideal to have the year 2000 as the initial year, as this is the first year of existence of the UNGC, 2002 is still the very early days of the initiative. For one thing, the obligation to submit a communication on progress was only established in 2003 (Hamid and Jones, 2010) and the UNGC's 10<sup>th</sup> Principle on anti-corruption efforts was only launched in 2004 (UNGC, 2014). The performance data goes until 2011. This represents an important proportion of UNGC's years of

existence – over two thirds, therefore presenting an interesting and rich period for analysis.

A summary of the dependent variables is provided on the table below.

Table 25: List of dependent variables

Dependent variable	UNGC	Explanation	Values
	issue /		
	Principle		
SOCSCORE	Social	"The social pillar measures a company's capacity to generate trust and loyalty with its workforce, customers and society, through its use of best management practices. It is a reflection of the company's reputation and the health of its license to operate, which are key factors in determining its ability to generate long term shareholder value."	0-100
ENVSCORE	Environ ment	"The environmental pillar measures a company's impact on living and non-living natural systems, including the air, land and water, as well as complete ecosystems. It reflects how well a company uses best management practices to avoid environmental risks and capitalize on environmental opportunities in order to generate long term shareholder value."	0-100
CGVSCORE	Governa nce	"The corporate governance pillar measures a company's systems and processes, which ensure that its board members and executives act in the best interests of its long term shareholders. It reflects a company's capacity, through its use of best management practices, to direct and control its rights and responsibilities through the creation of incentives, as well as checks and balances in order to generate long term shareholder value."	0-100
Human rights policies in house	P1	"Does the company have a general, all-purpose policy regarding human rights?"	0 or 1
Human rights processes in house	P1	"Does the company describe, claim to have or mention processes in place to ensure the respect of human rights in general?"	0 or 1
Human rights policies supply chain	P2	"Does the company have a human rights policy applying to its supply chain?"	0 or 1
Human rights processes supply chain	P2	"Does the company describe, claim to have or mention processes in place to apply human rights standards to its supply chain?"	0 or 1
Freedom of association policy	P3	"Does the company have a policy to ensure the freedom of association of its employees?"	0 or 1
Freedom of association processes	P3	"Does the company describe, claim to have or mention the processes in place to ensure the freedom of association of its employees?"	0 or 1
Trade union representation	P3	"Percentage of employees represented by independent trade union organizations or covered by collective bargaining agreements."	0-100
Forced labour policies	P4	"Does the company have a policy to avoid forced labour?"	0 or 1
Forced labour processes	P4	"Does the company describe, claim to have or mention processes in place to avoid the use of forced labour?"	0 or 1
Child labour policies	P5	"Does the company have a policy to avoid child labour?"	0 or 1
Child labour processes	P5	"Does the company describe, claim to have or mention processes in place to avoid the use of child labour?"	0 or 1
Diversity policies	P6	"Does the company have a diversity and equal opportunity policy?"	0 or 1
Diversity processes	P6	"Does the company describe the implementation of its diversity and opportunity policy?"	0 or 1

Percentage of women	P6	"Percentage of women managers."	0-100
managers			
Emission reduction	P7/8	"Does the company have a policy for reducing environmental emissions or	0 or 1
policy		its impacts on biodiversity? "	
Resource reduction	P7/8	"Does the company have a policy for reducing the use of natural	0 or 1
policy		resources?"	
Environmental	P7/8	"Does the company describe, claim to have or mention processes in place	0 or 1
management		to maintain an environmental management system?"	
Environmental	P7/8	Total amount of environmental expenditures as provided by ASSET4,	any
expenditures by pre-tax		divided by Profit before tax, as provided by Datastream.	
profit			
Product innovation	P9	"Does the company have an environmental product innovation policy (eco-	0 or 1
policy		design, life cycle assessment, dematerialization)?"	
Product innovation	P9	"Does the company describe the implementation of its environmental	0 or 1
processes		product innovation policy?"	
Anti-corruption policy	P10	"Does the company have a policy to avoid bribery and corruption at all its	0 or 1
		operations?"	
Anti-corruption	P10	"Does the company describe, claim to have or mention processes in place	0 or 1
processes		to avoid bribery and corruption practices at all its operations?"	
Total donations by pre-	Support	Total amount of all donations by the company as provided by ASSET4,	any
tax profit	to UN	divided by Profit before tax, as provided by Datastream.	
	goals		

It is important to highlight that SOCSCORE, ENVSCORE and CGVSCORE are scores. For ASSET4 data that means that they are a number between 0 and 100 that indicates the firm's performance in comparison to the remaining ASSET4 universe for a particular issue.

# 7.2.3 Independent Variables

*NGOs concentration in a country* is represented by the cumulative participation of such organisations (global and local NGOs) in the UNGC in each country per year. These variables were calculated using data from the UNGC dataset and follow similar use in the literature(Bernhagen et al., 2012, Perez-Batres et al., 2011).

Level of economic development was represented by a dummy variables DEVELOPEDVSNOT, which takes a value of 1 if the country is classified as a developed economy and 0 if otherwise. Country classification was obtained from the 2013 World Economic Situation and Prospects (WESP), prepared by the United Nations Department of Economic and Social Affairs (UN/DESA), the United Nations Conference on Trade and Development (UNCTAD) and the five United Nations regional commissions (Economic Commission for Africa (ECA), Economic Commission for Latin America and the Caribbean (ECLAC), Economic and Social Commission for Asia and the Pacific (ESCAP) and Economic and Social Commission for Western Asia (ESCWA).

Board Diversity was obtained from ASSET4 and represents the percentage of women on the board of directors.

Peer pressure at country and industry levels reflects the average performance of firms in the total sample (i.e. participants and non-participants) for each of the dependent variables, i.e. for each model a different set of variables was created. It was calculated from ASSET4 data, using SPSS, and lagged by one year.

Foreign Direct Investment (FDI) was represented by Inward FDI investment stock, annual, as provided by UNCTAD (United Nations Conference on Trade and Development), Division on Investment and Enterprise.

Level of firm internationalisation was represented by foreign sales as a percentage of total sales, both obtained from Datastream.

Governance was represented by the World Bank's Worldwide Governance Indicators (WGI). The WGI cover over 200 countries since 1996, and consists of composite indicators in six dimensions of governance, namely: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Estimate of governance for each dimension ranges from approximately -2.5 (weak governance performance) to +2.5 (strong governance performance). Voice and accountability represents the extent to which citizens feel they are able to select their government, as well as enjoy freedom of expression and association. Political stability and absence of violence represent the perception of the likelihood that a government will be destabilised by unconstitutional or violent means. Government effectiveness represents perceptions of the quality of civil service as well as of policy formulation and implementation; it also reflects perceptions of government's commitments to public policies. Regulatory quality reflects perceptions of the government's ability to define and implement policies that allow for the development of the private sector. Rule of law reflects the extent to which stakeholders trust and are likely to abide by the rules of society. Finally, control of corruption shows perceptions of the extent to which public power is used for private gain.

Level of democracy was represented by the Polity IV dataset provided by the Centre for Systemic Peace. It follows similar use in other studies (Perkins and Neumayer, 2010, Lim and Tsutsui, 2012, Bernhagen and Mitchell, 2010, Bernhagen et al., 2012). This indicator ranges from +10 (full democracy) to -10 (full autocracy).

*UNGC Network Launch* was obtained from the UNGC website and is represented by a dummy variable that takes a value of 1 if a UNGC network was launched in the country in 2010 or before and 0 if otherwise.

Stringency of regulatory environment was operationalised following Berliner and Prakash (2010). It encompasses measures of the stringency of credit market regulations, labour market regulations and business regulations, taken from the Economic Freedom of the World dataset. For these, the larger the number the higher the freedom or the less stringent the regulatory environment is. The variable for credit market regulations is formed by a combination of the following elements: ownership of banks, private sector credit and interest rate controls / negative real interest rates. A higher rate indicates that the country uses a private banking system to allocate credit to private organisations and refrains from controlling interest rates. Labour market regulations combines hiring regulations and minimum wage, hiring and firing regulations, centralized collective bargaining, working hours regulations, mandated cost of worker dismissal, and conscription. A country that receives a higher rating therefore has more flexible labour laws, leaving market forces to define wages as well as hiring and firing conditions. Finally, business regulations refer to a combination of administrative requirements, bureaucracy costs, starting a business, extra payments/bribes/favouritism, licensing restrictions and cost of tax compliance. Countries that receive higher ratings here leave markets to define prices and do not display regulatory activities that cause delays to entry into business and increase costs of production (Gwartney et al., 2011).

A dummy for *extractive industry* was created in SPSS. It gathers firms classified under SIC codes 10 (metal mining), 12 (coal mining), 13 (oil and gas extraction) and 14 (mining and quarrying of non-metallic minerals, except fuels). Authors have found different solutions to represent high impact industries. Bansal and Bogner (2002) focused on mining, forestry and chemicals; Knudsen (2011) focused on oil and manufacturing; Perez-Bastres et al (2012b) developed their own pollution intensiveness ranking; and Bernhagen and Mitchel (2010) looked into oil and gas and materials (these including mining and forestry product companies). Recognising this variety and the lack of a one fully agreed definition of high impact / extractive industry, this study follows EITI (Extractive Industry Transparency Initiative)'s focus on oil, gas and mining companies as firms in the extractive industry (EITI, 2014).

Firm size was measured as the log of employees, calculated from the variable number of employees provided by Datastream.

#### 7.2.4 Control variables

Slack resources are represented by ROTA (return on total assets). This data was obtained from Datastream.

Time of participation in the UNGC was measured as the number of years that have passed since the focal firm was first classified as a UNGC participant by ASSET4.

To measure *previous performa*nce the dependent variable for each model was lagged by one year.

# 7.3 Methods for analysis

Given the different types of dependent variables, two different methods were used for the analysis. For the models that had a binary variable as a depend variable, binary logistic regression was used. For the models that had a continuous variable as the dependent variable, linear regression was used.

# 7.4 Results

Correlations were run to identify potential issues of multicollinearity<sup>15</sup>. While most correlation coefficients conform to the norms (correlation coefficient lower than 0.8 (Field, 2009)), correlation coefficients between some variables presented some concern. A number of the correlations higher than 0.8 were observed between dependent variables or between dependent variables and the lag of other dependent variables (either the LAG of the dependent variable itself or the measures of peer pressure). This is, however, not a concern because these variables were not going to be together in the same model.

Of interest to this study, correlations coefficients above the threshold were observed among some of the independent variables representing governance, namely government effectiveness, rule of law, regulatory quality and control of corruption. Government effectiveness was also highly correlated with business regulation, voice with rule of law and the dummy for developed country, and the variable for Global NGO was highly correlated with Inward FDI. Given the potential multicollinearity concern, further tests were run to check the Variance Inflation Factors (VIF). Although there is not a clearly established threshold of when a value of VIF should

<sup>&</sup>lt;sup>15</sup> Given the large size of the correlation table it was not included in this study; however, this is available upon request.

become a concern, this study follows Field (2009) in that values above 10 signal potential problems of multicollinearity.

The VIFs for rule of law, government effectiveness and control of corruption remained well above 10 in the two different tests for VIFs. In addition, these variables had tolerance statistics below 0.1 suggesting serious problems of multicollinearity (Field, 2009). Regulatory quality, voice, developed country, Inward FDI and Global NGO did not show any VIF above 10. In views of these results, rule of law, government effectiveness and control of corruption were dropped from the final models. The remaining independent variables were retained.

Table 26: Variance Inflation Factors (VIF)

	Collinearit	y Statistics		Collinearity	y Statistics
	Tolerance	VIF		Tolerance	VIF
(Constant)			(Constant)		
ROTA	0.799	1.251	ROTA	0.861	1.162
Years as UNGC participant	0.741	1.349	Years as UNGC participant	0.755	1.325
Global NGOs	0.176	5.686	Global NGOs	0.23	4.347
Local NGOs	0.202	4.944	Local NGOs	0.219	4.571
Developed country	0.3	3.337	Developed country	0.298	3.355
Board gender diversity	0.634	1.579	Board gender diversity	0.752	1.329
Inward FDI	0.206	4.856	Inward FDI	0.271	3.692
Foreign sales per total sales	0.692	1.444	Foreign sales per total sales	0.746	1.341
Voice and accountability	0.147	6.786	Voice and accountability	0.141	7.094
Political stability	0.31	3.224	Political stability	0.307	3.257
Regulatory quality	0.134	7.473	Regulatory quality	0.132	7.581
Government effectiveness	0.042	23.601	Government effectiveness	0.058	17.328
Rule of law	0.033	30.608	Rule of law	0.046	21.725
Control of corruption	0.059	16.917	Control of corruption	0.06	16.553
Polity IV	0.321	3.117	Polity IV	0.23	4.346
Credit market regulation	0.48	2.083	Credit market regulation	0.497	2.011
Labour market regulation	0.4	2.503	Labour market regulation	0.416	2.405
Business regulation	0.293	3.416	Business regulation	0.328	3.048
Network launch by 2010	0.574	1.741	Network launch by 2010	0.549	1.821
Extractive industry	0.707	1.414	Extractive industry	0.702	1.425
Firm size	0.66	1.515	Firm size	0.743	1.346
LAGS(ValueDiversityandOpportunityManagersFemaleMaleRatio,1)	0.363	2.759	LAGS(SOCSCORE,1)	0.807	1.239
LAGS(AVRGValueDiverOppManagersFemaleMaleRatioINDUSTRY,1)	0.424	2.358	LAGS(AVRGSOCSCOREINDUSTRY,1)	0.802	1.246
LAGS(AVRGValueDiverOppManagersFemaleMaleRatioCOUNTRY,1)	0.409	2.443	LAGS(AVRGSOCSCORECOUNTRY,1)	0.395	2.532
a Dependent Variable: ValueDiversityandOpportunityManagersFemale	MaleRatio		a Dependent Variable: SOCSCORE		

The results of the linear and logistic regressions are presented in tables 24 to 26. There are 26 dependent variables, as listed and described in table 22.

Models 01 to 26: Base Models

Table 27: Regression tables for base models

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11
				Human	Human	Human	Human				
	SOCSCOR	ENVSCOR	CGVSCOR	Rights	Rights	Rights	Rights	Freedom	Freedom	Trade union	Forced
Models	E	E	E	policies in	processes	policies	processes	association	association	representation	labour
						supply	supply	policy	processes	representation	policies
				house	in house	chain	chain	F	p		p =
	31.349	24.987	12.163	-0.792	-2.259	-1.539	-2.551	-1.586	-2.861	4.715	-1.478
0											
Constant	(0.879)	(0.873)	(0.634)	(0.114)	(0.114)	(0.109)	(0.121)	(0.111)	(0.136)	(1)	(0.111)
	***	***	***	***	***	***				1	
	0.028	0.028	0.03	0.001	0.009	0.01	0.027	0.021	0.025	-0.094	0.025
ROTA	(0.084)	(0.029)	(0.036)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.009)	(0.049)	(0.009)
	(0.004)	(0.020)	(0.000)	(0.000)		(0.000)	***	**	***	*	***
	-0.001	0.125	0.062	0.081	0.157	0.185	0.167	0.015	0.058	-0.165	0.085
Years as UNGC participant				(0.033)	(0.026)	(0.031)	(0.027)		(0.029)		(0.03)
	(0.084)	(0.092)	(0.112)	` ** ´	***	` *** ´	***	(0.027)	**	(0.143)	***
	0.645	0.707	0.834	3.872	4.205	4.249	4.353	4.335	4.567	0.95	4.643
LAG Dependent Variable	(0.011)	(0.011)	(0.01)	(0.148)	(0.145)	(0.157)	(0.155)	(0.139)	(0.156)	(0.012)	(0.173)
E to Dependent variable	***	***	***	***	***	***	***	***	***	(0.012)	***
NI .	0000	0000	0000	2795	0705	2795	2795	2795	2795	700	2795
N .	2868	2868	2868	2795	2795	2795	2795	2/95	2/95	783	2/95
R Square	0.578	0.626	0.743							0.894	
Adjusted R Square	0.578	0.626	0.743							0.893	
Nagelkerke R Square				0.562	0.635	0.658	0.646	0.67	0.633		0.68
Percentage correct cases				88.5	75.6	83.2	75	86.5	76.1		84.3
	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22
	F					D	F11		Environmen	Environmental	Dec decet
	Forced	Child labour	Child labour	Diversity	Diversity	Percentage	Emission	Resource	tal	expenditures	Product
Models	labour	policies	processes	policies	processes	of women	reduction	reduction	manageme	by pre-tax	innovation
	processes	policies	processes	policies	processes	managers	policy	policy	nt	profit	policy
	-3.638	-1.387	-3.34		-0.762	2.587	-0.659		-1.588	590.861	-1.694
0				0.046				-0.125			
Constant	(0.173)	(0.115)	(0.15)	(0.196)	(0.125)	(0.37)	(0.166)	(0.276)	(0.11)	(358.169)	(0.128)
			***	( /	***	***		(,	***	*	
	0.045	0.027	0.056	-0.001	0.005	0.022	0.025	0.002	-0.003	-3.227	0.017
ROTA	(0.01)	(0.01)	(0.009)	(0.019)	(0.01)	(0.021)	(0.013)	(0.027)	(0.008)	(28.675)	(0.009)
	***	***	***	(0.013)	(0.01)	(0.021)	*	(0.021)	(0.000)	(20.073)	*
	0.087	0.092	0.105	0.215	0.222	0.006	0.010	0.244	0.127	74 506	0.071
Years as UNGC participant	(0.035)	(0.033)	(0.03)	(0.079)	(0.041)	-0.006	0.019	(0.143)	(0.028)	-74.586	(0.032)
	**	***	***	***	***	(0.058)	(0.055)	*	***	(75.08)	**
	4.873	4.723	4.561	4.086	3.672	0.913	5.172	5.624	4.153		4.869
LAG Dependent Variable	(0.213)	(0.182)	(0.177)	(0.265)	(0.156)	(0.011)	(0.257)	(0.48)	(0.139)	-0.159	(0.163)
E to Dependent variable	***	***	***	***	***	***	***	***	***	(0.193)	***
N	2795	2795	2795	2795	2795	1283	2795	2795	2795	840	2795
R Square	2195	2195	2195	2195	2195	0.852	2195	2195	2195	0.002	2195
Adjusted R Square	0.554	0.000	0.0	0.40	0.50	0.852	0.004	0.000	0.050	-0.002	0.740
Nagelkerke R Square	0.554	0.686	0.6	0.46	0.53		0.631	0.609	0.653		0.719
Percentage correct cases	66.2	86.4	70.3	100	91.2		95.1	99.1	84		89.9
	M23	M24	M25	M26	1						
	Product	Anti-	Anti-	Total	1						
Models	innovation	corruption	corruption	donations	1						
Wodels	processes	policy	processes	by pre-tax							
	processes	policy	processes	profit							
	-1.226	-1.121	-1.945	140.956	1						
Constant	(0.085)	(0.128)	(0.115)								
	***	***	***	(151.092)							
	0.02	0.046	0.045		1						
ROTA	(0.006)	(0.012)	(0.009)	0.471							
ROIA	(0.000)	(0.012)	(0.009)	(10.088)							
	0.092	0.072	0.174	l	1						
				-21.12							
Years as UNGC participant	(0.018)	(0.04)	(0.029)	(32.181)							
	***	*	***	,-=,	1						
	1.713	4.802	4.482	0.029	1						
LAG Dependent Variable	(0.085)	(0.201)	(0.165)	(0.116)							
	***	***	***	(0.110)							
					1						
N	2795	2795	2795	1391	1						
R Square			2.00	0	†						
		-	-	-0.002	ł						
Adjusted R Square	0.231	0.666	0.670	-0.002	-						
	0.231 67.6	0.666 90.3	0.679 81.6	-0.002							

Models 1 to 26 are the base models. These are the most parsimonious models in number of variables, allowing for an assessment of the impact of slack resources, time as a participant and previous performance in current performance. It is important to highlight that, despite being parsimonious in number of variables, these models display, in most cases, high R squares and Nagelkerke R squares. This can be largely attributed to the use of the lag of the dependent variable as one of the independent variables. One could argue that what the firm did the year before, from a

performance perspective, will have an important impact in what the firm will do in the current year. This may be especially true for the dummy variables – for example, if a firm had a human rights policy in the previous year, it is highly likely that it will still have it in the current year. In addition, the literature suggests that firms are relatively slow in changing their corporate social performance – i.e. one should expect relatively moderate variation from one year to the other. Therefore, in those cases and for those reasons, the strong explanatory power was not surprising.

Model 1, 2 and 3 have SOCSCORE, ENVSCORE and CGVSCORE as the dependent variables, respectively. In all three models, only previous performance has a significant and positive impact in performance. Nevertheless, all of them explain over 50% of the variation in the depended variables, more specifically 57.8%, 62.6% and 74.3% (R<sup>2</sup>).

Models 4 and 5 and 6 focus on human rights and also explain over 50% of the variation in the variable, 56.2%, 63.5% and 66% respectively (Nagelkerke  $R^2$ ). For those models time as a participant becomes positive and significant, together with previous performance. For model 7 (Nagelkerke  $R^2$ =0.646), which focuses on implementation of human rights policies in the supply chain, both these variables and slack resources are positive and significant.

Models 8 to 10 focus on freedom of association (policies, processes and outcomes in this order). These models explain respectively 67% (8), 63.3% (9) (Nagelkerke  $R^2$ ) and 89.4% (10) ( $R^2$ ) of variation in their respective dependent variables. While previous performance was positive and significant for all three models, slack resources also increased the odds of firms having a policy and implementing it, and time of membership was also positive and significant for implementation.

Models 11 and 12 focus on policies and processes regarding forced labour, respectively. Both have slack resources, time of participation and previous performance positively and significantly increasing the odds of better performance. While model 11 explained 68% of variation, model 12 explained 55.4% (Nagelkerke R² in both cases). Models 13 and 14, on the other hand, focus on child labour, but also see all three independent variables increasing the odds of higher performance. Model 13 explains 68.6% of variation and model 14, 60% (Nagelkerke R²). Still within the labour umbrella, models 15, 16 and 17 focus on diversity (policies, processes and outcomes respectively). Time as a participant and previous performance increase the odds of existence of diversity policies (model 15) and the

implementation of these (model 16). Model 15 correctly classifies 100% of firms with a diversity policy, explaining 46% of variation (Nagelkerke R<sup>2</sup>). Model 16 explains 53% (Nagelkerke R<sup>2</sup>) and model 17, 85.2% (R<sup>2</sup>). Only previous performance was significantly increasing the odds of higher percentage of women managers (model 17).

Models 18 to 21 focus on the UNGC's principles 7 and 8 on the environment. Previous performance is positively and significantly associated with increasing odds of having a policy on emission (model 18) and on resource reduction (model 19) as well as on having environmental management in place (model 20). The first three models explain over 50% of variation in the dependent variables, or more specifically 63.1% (18), 60.9% (19), and 65.3% (20) (Nagelkerke R²). In addition, models 18 to 20 correctly classify over 80% of firms (95.1%, 99.1% and 84%, respectively). Model 21, however, explains only 0.02% of variation (R²), and none of the control variables were significant. Models 22 and 23 are also part of the environment issue, but focus on innovation. While model 22 explains 71.9% of the variation (Nagelkerke R²) and correctly classifies 89.9% of firms with a product innovation policy, model 23 explains only 23.1% of variation (Nagelkerke R²) and correctly classifies 67.6% of firms that show evidence of implementing it. Time as a participant and previous performance increase the odds of better performance in both.

Models 24 and 25 focus on anti-corruption efforts, namely the existence of policies (24) and evidence of implementation efforts (25). Model 24 explains 66.6% of the variation (Nagelkerke  $R^2$ ) in the dependent variable, correctly classifying 90.3% of firms with an anti-corruption policy. Model 25, on the other hand, explains 67.9% of the variation (Nagelkerke  $R^2$ ) in the dependent variable, correctly classifying 81.6% of firms that display evidence of implementing them. Slack resources and previous performance positively and significantly increase the odds of better performance in both. Finally, model 26 focuses on philanthropy, as a way of support to the UN goals. The model was a very poor fit with a  $R^2$  of zero.

Models 27 to 52: Understanding what drives some participants to improve more than others

This set of models includes, among other independent variables, a LAG of the dependent variable to control for the effects of firms' previous performance on current performance. Due to having the lag dependent variable, these models help one understand the drivers for different rates of change, or why some participants

improve performance more than others. Generally speaking, models 27 to 52 do not offer a major improvement in explanatory power compared to the base models; in some cases one can actually observe a drop in explanatory power. However, they do offer the opportunity for a more fine-grained analysis of drivers for performance amongst UNGC participants.

Table 28: Regression table for models 27 to 38 - understanding improvements in performance

	M27	M28	M29	M30	M31	M32	M33	M34	M35	M36	M37	M38
Models	SOCSCORE	ENVSCORE	CGVSCORE	Human Rights policies in house	Human Rights processes in house	Human Rights policies supply chain	Human Rights processes supply chain	Freedom association policy	Freedom association processes	Trade union representation	Forced labour policies	Forced labour processes
Constant	22.272 (5.046)	7.427 (5.193)	2.039 (6.412)	-2.565 (1.559)	-6.216 (1.894) ***	-3.104 (1.524) **	-1.501 (1.483)	0.694 (1.499)	-0.791 (1.66)	13.542 (9.62)	-2.536 (1.508) *	-1.946 (2.066)
LAG Dependent Variable	0.572 (0.014)	0.618 (0.014) ***	0.639 (0.017)	3.543 (0.178)	3.787 (0.175)	3.546 (0.177) ***	3.975 (0.193)	3.86 (0.164)	4.465 (0.197) ***	0.885 (0.023)	4.252 (0.199) ***	4.664 (0.276)
ROTA	0.059 (0.033)	0.079 (0.037) **	-0.065 (0.045)	-0.01 (0.012)	0.006 (0.01)	0.004 (0.011)	0.017 (0.01)	-0.009 (0.011)	0.02 (0.011)	-0.082 (0.064)	0.008 (0.011)	0.029 (0.013) **
Years as UNGC participant	-0.052 (0.11)	-0.004 (0.123)	0.076 (0.148)	0.05 (0.046)	0.169 (0.038)	0.109 (0.04) ***	0.174 (0.038)	-0.039 (0.037)	0.075 (0.041)	-0.134 (0.228)	0.043 (0.041)	0.056 (0.052)
Global NGO	-0.084 (0.057)	-0.079 (0.066)	0.06 (0.079)	0.045 (0.02) **	0.008 (0.018)	0.029 (0.02)	-0.011 (0.019)	0.03 (0.019)	0.008 (0.02)	0.035 (0.115)	0.028 (0.022)	-0.012 (0.023)
Developed country	-1.291 (1.562)	-1.694 (1.826)	-3.391 (2.138)	-0.899 (0.576)	-0.935 (0.542)	-0.247 (0.506)	-1.482 (0.534) ***	-1.214 (0.551) **	-1.142 (0.556) **	-2.543 (3.014)	0.304 (0.545)	-1.493 (0.663) **
Board gender diversity	-0.001 (0.023)	0.025 (0.026)	0.019 (0.033)	0.011 (0.008)	0.002 (0.008)	-0.003 (0.007)	0.001 (0.008)	0.008 (0.007)	0.013 (0.008) *	-0.046 (0.046)	0.005 (0.008)	0.001 (0.011)
Inward FDI	0.0000004146 (0)	0.0000008986 (0) *	-0.000003905 (0)	0 (0)	0 (0)	0 (0)	0 (0) *	0 (0)	0 (0)	-0.0000008887 (0)	0 (0)	0 (0)
Foreign sales per total sales	-0.011 (0.009)	-0.022 (0.01) **	0.024 (0.012) **	0.002 (0.003)	0.004 (0.003)	0.005 (0.003) *	0.007 (0.003) **	0.007 (0.003) **	0 (0.003)	0.013 (0.017)	0.007 (0.003) **	0.008 (0.004) **
Voice and accountability	-0.573 (1.495)	-1.776 (1.637)	8.316 (1.992) ***	-0.871 (0.49) *	-0.891 (0.535) *	0.197 (0.495)	0.122 (0.53)	0.332 (0.492)	0.36 (0.553)	4.78 (4.005)	-0.518 (0.498)	-1.46 (0.708) **
Political stability	-1.368 (0.659) **	0.447 (0.706)	-1.759 (0.863) **	0.454 (0.223) **	0.262 (0.197)	0.164 (0.207)	0.03 (0.209)	0.061 (0.22)	-0.519 (0.229) **	1.699 (1.301)	0.184 (0.214)	-0.197 (0.278)
Regulatory quality	2.847 (1.19) **	1.819 (1.367)	-1.36 (1.647)	1.289 (0.408) ***	0.936 (0.413) **	0.759 (0.392) *	1.496 (0.404) ***	1.346 (0.387)	0.856 (0.421) **	-4.192 (2.804)	0.432 (0.422)	2.016 (0.556) ***
Polity IV	0.367 (0.216)	0.78 (0.245) ***	-0.562 (0.289) *	0.196 (0.074) ***	0.408 (0.142) ***	0.036 (0.069)	0.131 (0.071) *	0.074 (0.07)	0.108 (0.079)	-0.143 (0.638)	0.061 (0.072)	0.254 (0.098) **
Credit market regulation	-0.185 (0.279)	-0.031 (0.318)	-0.167 (0.382)	0.209 (0.098) **	0.152 (0.092) *	0.003 (0.096)	0.102 (0.096)	0.001 (0.095)	0.216 (0.101) **	-0.911 (0.558)	0.12 (0.096)	0.076 (0.13)
Labour market regulation	-0.22 (0.199)	0.019 (0.212)	0.151 (0.24)	-0.068 (0.06)	0.153 (0.059)	0.035 (0.057)	0.075 (0.061)	-0.196 (0.064)	-0.187 (0.072)	0.167 (0.453)	-0.002 (0.063)	-0.037 (0.085)
Business regulation	0.002 (0.468)	-0.073 (0.54)	1.319 (0.645) **	-0.508 (0.171) ***	-0.578 (0.157) ***	-0.532 (0.158) ***	-0.923 (0.159) ***	-0.706 (0.163)	-0.573 (0.176) ***	-0.511 (0.959)	-0.496 (0.161) ***	-0.58 (0.227) **
Network launch by 2010	-0.186 (1.563)	0.017 (1.815)	-2.539 (2.115)	-0.29 (0.635)	-0.402 (0.492)	0.06 (0.473)	-0.175 (0.492)	-0.464 (0.515)	-1.097 (0.503)	0.583 (2.307)	-0.143 (0.484)	-0.921 (0.581)
Extractive industry	-0.5 (0.985)	-0.736 (1.095)	0.396 (1.4)	1.411 (0.536)	0.426 (0.305)	-0.077 (0.308)	-0.202 (0.292)	1.149 (0.409) ***	-0.143 (0.329)	0.085 (1.384)	0.552 (0.352)	0.078 (0.37)
Firm size	1.001 (0.183)	1.256 (0.213)	0.617 (0.249) **	0.172 (0.061)	0.17 (0.058)	0.246 (0.057) ***	0.104 (0.059) *	0.15 (0.058) **	0.076 (0.068)	0.125 (0.391)	0.159 (0.06)	0.02 (0.089)
LAG Peer performance in country	0.016 (0.026)	0.023 (0.03)	0.269 (0.03) ***	0.887 (0.588)	0.541 (0.827)	1.755 (0.549) ***	0.428 (0.849)	0.885 (0.598)	-1.544 (0.941)	0.058 (0.046)	0.072 (0.638)	-0.296 (2.804)
LAG peer performance in industry	0.061 (0.029) **	0.098 (0.022)	-0.052 (0.045)	0.019 (0.76)	2.96 (0.987)	2.926 (0.73)	3.808 (1.159)	1.73 (0.791) **	-0.958 (1.45)	0.072 (0.03)	3.052 (0.722) ***	3.903 (2.22) *
N D.O.	2099	2099	2099	2059	2059	2059	2059	2059	2059	509	2059	2059
R Square Adjusted R Square	0.539 0.535	0.592 0.588	0.742 0.739							0.886 0.882		-
Nagelkerke R Square	0.555	0.500	0.755	0.558	0.639	0.654	0.645	0.683	0.626	0.002	0.688	0.553
Percentage correct cases				90.7	73.9	84.2	72.3	87.3	74.6		84.6	64

Table 29: Regression table for models 39 to 52 - understanding improvements in performance

	M39	M40	M41	M42	M43	M44	M45	M46	M47	M48	M49	M50	M51	M52
Models	Child labour policies	Child labour processes	Diversity policies	Diversity processes	Percentage of women managers	Emission reduction policy	Resource reduction policy	Environmen tal manageme nt	Environment al expenditures	Product innovation policy	Product innovation processes	Anti- corruption policy	Anti- corruption processes	Total donations by pre-tax profit
Constant	-3.482 (1.637)	-3.134 (1.949)	-3.041 (3.468)	-3.742 (1.788) **	-4.658 (3.743)	-6.527 (2.48) ***	-9.074 (5.457)	-1.153 (1.373)	513.862 (1199.92)	-6.716 (1.666)	-3.787 (1.103)	-4.199 (1.869) **	-3.041 (1.478) **	437.167 (440.514)
LAG Dependent Variable	4.152 (0.207)	4.116 (0.226)	3.161 (0.314)	2.921 (0.189)	0.797 (0.021)	4.786 (0.326)	5.253 (0.691)	3.65 (0.161)	0.007 (0.083)	4.502 (0.205)	1.525 (0.124)	4.136 (0.229)	3.768 (0.19)	1.312 (0.345)
ROTA	0.014 (0.012)	0.041 (0.012)	0.001 (0.024)	0.012 (0.012)	0.056 (0.029) *	0.047 (0.019) **	0.028 (0.039)	-0.013 (0.01)	0.406 (9.786)	0.029 (0.012)	0.028 (0.008)	0.025 (0.015)	0.029 (0.011)	3.201 (3.4)
Years as UNGC participant	0.032 (0.044)	0.089 (0.043) **	0.288 (0.115) **	0.138 (0.055) **	0.044 (0.082)	0.025 (0.079)	0.208 (0.197)	0.099 (0.037)	21.055 (26.319)	0.036 (0.046)	0.017 (0.027)	0.025 (0.055)	0.113 (0.039)	16.788 (12.196)
Global NGO	0.027 (0.023)	-0.023 (0.02)	0.1 (0.082)	0.083 (0.043) *	-0.016 (0.053)	-0.004 (0.038)	0.063 (0.094)	0.01 (0.018)	-1.858 (14.668)	-0.011 (0.023)	-0.035 (0.014) **	0.031 (0.037)	0.135 (0.038)	-5.867 (6.209)
Developed country	0.06 (0.582)	-2.246 (0.634) ***	-0.221 (0.956)	-0.699 (0.642)	0.172 (1.412)	1.391 (0.812)	2.161 (1.724)	0.881 (0.5)	172.01 (366.462)	0.049 (0.611)	0.147 (0.398)	-0.735 (0.657)	-0.883 (0.515)	40.846 (149.009)
Board gender diversity	-0.001 (0.008)	0.014 (0.009)	-0.015 (0.014)	0.007 (0.009)	0.02 (0.019)	-0.004 (0.012)	0.001 (0.025)	0.004 (0.007)	-3.548 (7.156)	-0.01 (0.009)	-0.004 (0.006)	0.011 (0.01)	0.016 (0.007) **	3.559 (2.721)
Inward FDI	0 (0)	0 (0) *	0 (0)	0 (0)	0.000001144 (0)	0 (0)	0 (0)	0 (0)	-0.00008204 (0)	0 (0)	0 (0) ***	0 (0)	0 (0) **	0.000003765 (0)
Foreign sales per total sales	0.003 (0.003)	0.005 (0.004)	-0.006 (0.006)	-0.011 (0.003)	-0.013 (0.007) *	-0.004 (0.005)	0.006 (0.011)	-0.002 (0.003)	-2.435 (2.588)	-0.002 (0.003)	0 (0.002)	0.001 (0.003)	0.002 (0.003)	-1.112 (0.968)
Voice and accountability	0.071 (0.548)	-0.117 (0.682)	0.465 (0.9)	-1.604 (0.529)	-0.619 (1.515)	-1.476 (0.718) **	-0.167 (1.758)	-0.86 (0.441) *	-392.872 (452.255)	-0.613 (0.534)	0.001 (0.376)	0.116 (0.543)	-0.289 (0.473)	48.898 (163.84)
Political stability	-0.159 (0.231)	-0.194 (0.243)	0.579 (0.489)	1.191 (0.297)	0.098 (0.508)	0.026 (0.341)	-0.895 (0.795)	0.006 (0.196)	-76.934 (170.312)	0.124 (0.23)	0.57 (0.149)	0.348 (0.277)	1.07 (0.252)	-22.939 (63.632)
Regulatory quality	0.723 (0.437) *	1.648 (0.462)	0.85 (0.792)	0.598 (0.472)	0.111 (1.05)	0.343 (0.67)	0.449 (1.212)	0.867 (0.367)	721.882 (386.867)	0.934 (0.446)	0.828 (0.3)	1.238 (0.488) **	0.232 (0.437)	53.969 (134.665)
Polity IV	0.038 (0.076)	0.325 (0.11) ***	-0.029 (0.141)	0.262 (0.076)	0.015 (0.192)	0.111 (0.111)	-0.117 (0.277)	0.108 (0.068)	-5.051 (63.535)	0.088 (0.083)	0.038 (0.056)	0.085 (0.096)	0.12 (0.068) *	-2.133 (21.351)
Credit market regulation	0.185 (0.101) *	0.049 (0.111)	-0.018 (0.225)	0.2 (0.117) *	0.66 (0.223)	0.109 (0.181)	0.636 (0.39)	0.227 (0.089)	-97.468 (74.916)	0.276 (0.105) ***	0.238 (0.069)	0.038 (0.116)	0.307 (0.098)	-28.037 (29.117)
Labour market regulation	0.002 (0.065)	-0.091 (0.073)	-0.009 (0.133)	-0.07 (0.071)	-0.193 (0.154)	0.013 (0.108)	-0.011 (0.218)	-0.066 (0.056)	-11.804 (52.524)	0.025 (0.07)	0.09 (0.043) **	0.001 (0.074)	-0.157 (0.065) **	15.822 (20.691)
Business regulation	-0.558 (0.171)	-0.472 (0.196) **	-0.23 (0.334)	-0.367 (0.182) **	-0.028 (0.375)	-0.134 (0.25)	-0.326 (0.572)	-0.754 (0.149)	-64.374 (129.64)	-0.463 (0.188) **	-0.987 (0.118)	-0.24 (0.189)	-0.504 (0.153)	-91.491 (53.439) *
Network launch by 2010	-0.497 (0.537)	-1.16 (0.515) **	-0.328 (1.122)	-0.773 (0.542)	0.893 (1.456)	0.318 (1.052)	0.689 (1.379)	-0.427 (0.468)	563.592 (427.149)	0.963 (0.603)	0.527 (0.405)	-0.788 (0.972)	-1.467 (0.498)	-157.407 (168.335)
Extractive industry	0.875 (0.435)	-0.379 (0.336)	0.409 (0.863)	-0.235 (0.346)	0.039 (0.664)	0.699 (0.827)	-0.527 (0.958)	0.168 (0.276)	-266.284 (219.119)	0.367 (0.412)	0.484 (0.243) **	1.22 (0.604) **	0.166 (0.333)	53.634 (86.011)
Firm size	0.239 (0.063)	0.053 (0.075)	0.207 (0.12)	0.263 (0.066)	-0.124 (0.15)	0.328 (0.093)	0.324 (0.176)	0.104 (0.056)	0.116 (51.501)	0.246 (0.066)	0.346 (0.047)	0.253 (0.073)	0.207 (0.059)	17.914 (19.714)
LAG Peer performance in country	0.369 (0.605)	-0.413 (1.366)	2.366 (1.111) **	1.103 (0.644)	0.043 (0.038)	0.536 (0.915)	-0.462 (1.779)	0.345 (0.517)	0.017 (0.159)	0.162 (0.635)	-0.126 (0.367)	1.562 (0.646) **	0.756 (0.557)	4.797 (1.39)
LAG peer performance in industry	3.642 (0.725)	5.858 (1.724)	0.911 (1.306)	1.547 (0.69)	0.197 (0.027)	2.061 (0.754)	2.508 (1.585)	2.493 (0.525)	0.062 (0.091)	2.743 (0.517)	2.449 (0.418)	0.014 (0.644)	1.27 (0.548)	0.163 (1.026)
N	2059	2059	2059	2059	936	2059	2059	2059	596	2059	2059	2059	2059	972
R Square	1				0.857				0.031					0.048
Adjusted R Square Nagelkerke R Square	0.687	0.592	0.453	0.558	0.854	0.646	0.609	0.633	-0.003	0.731	0.376	0.665	0.684	0.028
Percentage correct cases	86.9	68.4	99.4	93.5		97	99.7	82.6		90.6	74.1	91.1	81.4	

Model 27 has SOCSCORE as the dependent variable. The model can explain 53.9% of the variation in SOCSCORE. As expected, regulatory quality (Beta=2.847 p<0.05), firm size (Beta=1.001, p<0.01), previous performance (Beta=0.572, p<0.01) and peer performance at industry level (Beta=0.061, p<0.05) all significantly contribute to a higher score in social management. Firms in less politically stable countries, however, were also found to have higher performance in this variable. Model 28 explains 59.2% of the variation in ENVSCORE, with firm size (Beta=1.256, p<0.01), followed by level of democracy (Beta=0.78, p<0.01), previous performance (Beta=0.618, p<0.01), peer performance at industry level (Beta=0.098, p<0.01) and slack resources (Beta=0.079, p<0.05) all displaying positive and significant coefficients as expected. Different from expected, however, more internationalised firms displayed lower performance. For CGVSCORE, model 29 explained 74.2% of the variation. Voice (Beta=8.316, p<0.01), size (Beta=0.617, p<0.05), previous performance (Beta=0.639, p<0.01) and peer

performance at country level (Beta=0.269, p<0.01) all behaved as expected, significantly predicting improvements in governance performance.

Model 30 focuses on the existence of human rights policies. It explains 55.8% of the variation (Nagelkerke  $R^2$ ) and correctly classifies 90.7% of firms that have such policies. Previous performance has the greatest impact, increasing the odds of a firm having a human rights policy by 34.578 times (p<0.01). This is followed by belonging to an extractive industry (Exp(B)=4.098, p<0.01) and regulatory quality (Exp(B)=3.629, p<0.01) as the top three elements influencing the odds of higher performance in this variable. For human rights implementation processes, in model 31, previous performance remains the variable with the greatest influence increasing the odds of higher performance by 44.13 times (p<0.01); this is followed by performance of other firms in the industry (Exp(B)=19.3, p<0.01) and regulatory quality (Exp(B)=2.55, p<0.05). Model 31 explains 63.9% of the variation (Nagelkerke  $R^2$ ) and correctly classifies 73.9% of firms that have processes in place to implement human rights policies.

Model 32 focuses on the existence of human rights policies for the supply chain. It explains 65.4% of the variance (Nagelkerke  $R^2$ ), correctly classifying 84.2% of the firms. The odds of a firm having such policies is increased by 34.675 times by previous performance, 18.646 times by the industry peers' performance and 5.781 times by the performance of peers at country level (p<0.01 in all cases). Industry peer performance (Exp(B)=53.27) and previous performance (Exp(B)=45.077) are also strong elements influencing the odds of firm implementing these policies (p<0.01 in both cases) (model 33). They are followed by good regulatory quality (Exp(B)=4.463) Model 33 explains 64.5% of the variation in this variable (Nagelkerke  $R^2$ ) and correctly classifies 72.3% of firms.

Model 34 has the existence of freedom of association policies as its dependent variable. It explains 68.3% (Nagelkerke  $R^2$ ) and correctly classifies 87.3% of the firms, offering an improvement from model 08. Previous performance remains the main predictor, increasing the odds of a firm having such policy by 47.459 times (p<0.01). This is followed by peer performance within industry (Exp(B)=5.641, p<0.05) and regulatory quality (Exp(B)=3.841, p<0.01). Model 35 focuses on the implementation of freedom of association policies, explaining 62.6% of the variation (Nagelkerke  $R^2$ ) and correctly classifying 74.6% of firms. Once again and as expected previous performance is the main predictor (Exp(B)=86.945, p<0.01). This is followed by regulatory quality (Exp(B)=2.353, p<0.05) and credit market regulation

(Exp(B)=1.241, p<0.05). Model 36 focuses on the outcomes of these policies, having trade union representation as the dependent variable. It explains 88.6% of the variation ( $\mathbb{R}^2$ ) and only has two significant predictors, namely previous performance (Beta=0.885, p<0.01) and peer performance at industry level (Beta=0.072, p<0.05).

Models 37 and 38 have existence of forced labour policies (37) and implementation of these (38) as the dependent variables. While model 37 explains 68.8% of the variation (Nagelkerke  $R^2$ ) and correctly classifies 84.6% of the firms, model 38 explains a little less (Nagelkerke  $R^2$ =55.3%) and correctly classifies 64% of the firms. Previous performance is the main predictor in both models, increasing the odds of firms having the policy by 70.244 times (p<0.01) and implementing it by 106 times (p<0.01). The existence of a forced labour policy was also influenced by peer performance at industry level (Exp(B)=21.161, p<0.01) and firm size (Exp(B)=1.173, p<0.01). The other two more relevant predictors for implementation were regulatory quality (Exp(B)=7.511, p<0.01) and higher levels of democracy (Exp(B)=1.289, p<0.05).

Having a child labour policy and implementing it were the dependent variables for models 39 and 40, respectively. Model 39 explains 68.7% of variation (Nagelkerke  $R^2$ ) and correctly classifies 86.9% of the firms. Model 40, on the other hand, explains 59.2% of variation (Nagelkerke  $R^2$ ) and correctly classifies 68.4% of the firms. Previous performance is the main predictor of having a child labour policy (Exp(B)=63.55, p<0.01), followed by peer performance at industry level (Exp(B)=38.17, p<0.01) and belonging to the extractive industry (Exp(B)=2.4, p<0.05) as the top three. The odds of implementing child labour policies, on the other hand, were mainly influenced by peer performance at industry level first (Exp(B)=349.896, p<0.01), followed then by previous performance (Exp(B)=61.316, p<0.01) and regulatory quality (Exp(B)=5.195, p<0.01).

Still within the realm of labour, models 41, 42 and 43 focus on having a diversity policy, implementing it and on the outcome percentage of women managers, respectively. Model 41 explains 45.3% of variation (Nagelkerke  $R^2$ ) and correctly classifies 99.4% of the firms. The odds of having a diversity policy are only significantly increased by previous performance (Exp(B)=23.59, p<0.01), peer performance at country level (Exp(B)=10.65, p<0.05) and time as a UNGC participant (Exp(B)=1.334, p<0.05). Model 42 has more significant predictors, but the top three are previous performance (Exp(B)=18.567, p<0.01), peer performance within industry (Exp(B)=4.696, p<0.05) and political stability (Exp(B)=3.291, p<0.01).

It explains 55.8% of variation (Nagelkerke  $R^2$ ) and correctly classifies 93.5% of the firms. The percentage of female managers, on the other hand, is mainly predicted by previous performance (Beta=0.797, p<0.01), peer performance within industry (Beta=0.197, p<0.01) and less stringent credit market regulation (Beta=0.66, p<0.01). Model 43 explains 85.7% ( $R^2$ ) of the variation in the dependent variable. Previous performance was the predictor with the strongest explanatory power (Beta=0.797, p<0.01), followed by credit market regulation (Beta=0.66, p<0.01) and peer performance at industry level (Beta=0.197, p<0.01).

Models for the environmental performance start with the existence of an emission reduction policy (Model 44) and of a resource reduction policy (Model 45). Model 44 explains 64.6% of variation (Nagelkerke R<sup>2</sup>) and correctly classifies 97% of the firms. The three main predictors here are previous performance (Exp(B)=119.82, p<0.01), peer performance at industry level (Exp(B)=7.853, p<0.01) and firm size (Exp(B)=1.388, p<0.01). Model 45, on the other hand, only has one significant predictor - previous performance (Exp(B)=191.216, p<0.01). It explains 60.9% of variation (Nagelkerke R<sup>2</sup>) and correctly classifies 99.7% of the firms. Model 46 focuses on implementation and the existence of an environmental management system. It explains 63.3% of the variation and correctly classifies 82.6% of firms. The top three predictors are previous performance (Exp(B)=38.483, p<0.01), followed by peer performance at industry level (Exp(B)=12.092, p<0.01) and regulatory quality (Exp(B)=2.381, p<0.05). Environmental expenditure by pre-tax profit is the dependent variable for model 47. Model 47 offers a poor fit, explaining only 3.1% of variation (R<sup>2</sup>) in environment expenditures among participants. None of the independent variables are significant at 0.05 or less in this model.

Still on environment, but focusing on innovation, model 48 focuses on the existence of an environmental product innovation policy and model 49 on the implementation of this policy. Model 48 explains 73.1% of the variation (Nagelkerke  $R^2$ ) on the existence of such policies amongst participants and correctly classifies 90.6% of firms. Model 49, on the other hand, explains only 37.6% of variation (Nagelkerke  $R^2$ ), correctly classifying 74.1% of firms. The three top predictors for model 48 are previous performance (Exp(B)=90.174, p<0.01), peer performance at industry level (Exp(B)=15.527 p<0.01) and regulatory quality (Exp(B)=2.544, p<0.05). For model 49, peer performance at industry level is the main predictor (Exp(B)=11.579 p<0.01), followed by previous performance (Exp(B)=4.595 p<0.01) and regulatory quality (Exp(B)=2.288 p<0.01).

Models 50 and 51 focus on anti-corruption efforts, more specifically on the existence of anti-corruption policies (50) and the implementation of these (51). Model 50 explains 66.5% (Nagelkerke  $R^2$ ) of the variation on the existence of such policies amongst participants and correctly classifies 91.1% of firms. Previous performance increases the odds of firms having an anti-corruption policy by 62.573 times (p<0.01). Other firms in the country having such policies is also amongst the top three predictor (Exp(B)=4.767, p<0.05), followed by good regulatory quality (Exp(B)=3.45, p<0.05). Model 51 explains 68.4% of the variation (Nagelkerke  $R^2$ ) on implementation and correctly classifies 81.4% of firms. Several predictors are significant, but the top three factors influencing the odds of implementation are previous performance (Exp(B)=43.287, p<0.01), peer performance at industry level (Exp(B)=3.562 p<0.05) and political stability (Exp(B)=2.917, p<0.01).

Finally, model 52 focuses on firms' support to the UN's development goals through philanthropy. The dependent variable is the total amount of donations by pre-tax profit. The model explains only 4.8% of the variations in donations across participants. There are only two significant predictors, namely: level of donations by other firms in the country (Beta=4.797, p<0.01), and previous donations by the firm (Beta=1.312, p<0.01).

# Summary

The table below summarises the results of the full models, showing how often an independent variable was positive and significant or negative and significant, therefore highlighting the variables that were more often found to have a significant impact in different aspects of performance.

Table 30: Summary of occurrence of significant results

IMPROVEMENT IN PERFORMANCE - Models 27 to 52								
Independent Variable	Total Positive & Significant	% total models positive and significant	Total Negative & Significant	% total models negative and significant	Total number of models	Total significant	% total models significant	
LAG dependent variable	25	96.15%	0	0.00%	26	25	96.15%	
Peer performance within industry	17	65.38%	0	0.00%	26	17	65.38%	
Business regulation	1	3.85%	15	57.69%	26	16	61.54%	
Firm size	15	57.69%	0	0.00%	26	15	57.69%	
Regulatory quality	12	46.15%	0	0.00%	26	12	46.15%	
Years as UNGC participant	8	30.77%	0	0.00%	26	8	30.77%	
ROTA	7	26.92%	0	0.00%	26	7	26.92%	
Foreing sales per total sales	5	19.23%	2	7.69%	26	7	26.92%	
Political stability	4	15.38%	3	11.54%	26	7	26.92%	
Credit market regulation	7	26.92%	0	0.00%	26	7	26.92%	
Polity IV	6	23.08%	0	0.00%	26	6	23.08%	
Developed country	0	0.00%	5	19.23%	26	5	19.23%	
Labour market regulation	2	7.69%	3	11.54%	26	5	19.23%	
Extractive industry	5	19.23%	0	0.00%	26	5	19.23%	
Peer performance within country	5	19.23%	0	0.00%	26	5	19.23%	
Voice and accountability	1	3.85%	3	11.54%	26	4	15.38%	
Global NGOs	2	7.69%	1	3.85%	26	3	11.54%	
Network launch by 2010	0	0.00%	3	11.54%	26	3	11.54%	
Board gender diversity	1	3.85%	0	0.00%	26	1	3.85%	
Inward FDI	1	3.85%	0	0.00%	26	1	3.85%	

The table below shows how often the independent variables were significant (positively, negatively and total) for each of the UNGC issue areas:

Table 31: Summary table by UNGC issue area

				NVIRONMENT	ī						-	IUMAN RIGHT	s		
Independent variables	Total Positive & Significant	% total models positive and significant	Total Negative & Significant	% total models negative and significant	Total models	Total significant	% total models significant	Independent variables	Total Positive & Significant	% total models positive and significant	Total Negative & Significant	% total models negative and significant	Total models	Total significant	% total models significan
Lag dependent variable	5	83.3%	0	0.0%	6	5	83.3%	Business regulation	0	0.0%	4	100.0%	4	4	100.0
Peer performance within industry	4	66.7%	0	0.0%	6	4	66.7%	Lag dependent variable	4	100.0%	0	0.0%	4	4	100.0
Business regulation	0	0.0%	3	50.0%	6	3	50.0%	Firm size	3	75.0%	0	0.0%	4	3	75.0
Credit market regulation	3	50.0%	0	0.0%	6	3	50.0%	Peer performance within industry	3	75.0%	0	0.0%	4	3	75.0
Firm size	3	50.0%	0	0.0%	6	3	50.0%	Regulatory quality	3	75.0%	0	0.0%	4	3	75.0
Regulatory quality	3		0		6	3		Years as UNGC participant	3	75.0%	0		4	3	75.0
ROTA	3	50.0%	0		6	3		Polity IV	2		0		4	2	50.0
Extractive industry	1	16.7%	0		6		16.7%	Credit market regulation	1	25.0%	0		4	1	25.0
Global NGOs	0		1		6	1		Developed country	0		1		4	1	25.0
Labour market regulation	1	16.7%	0		6			Extractive industry	1	25.0%	0		4	1	25.0
Political stability	1	16.7%	0		6		16.7%	Foreign sales per total sales	1	25.0%	0		4	1	25.0
Voice and accountability	0		1		6			Global NGOs	1	25.0%	0		4	1	25.0
Years as UNGC participant	1	16.7%	0		- 6		10.770	Labour market regulation	1	25.0%	0		4	1	25.0
Developed country	0		0		6			Peer performance within country	1	25.0%	0		4	1	25.0
Foreign sales per total sales	0		0		6			Political stability	1	25.0%	0	0.0%	4	1	25.0
Inward FDI	0	0.011	0		6			Inward FDI	1	0.0%	0		4	0	0.0
	0						0.0		0				-	0	
Network launch by 2010			0		6			Network launch by 2010	٥	0.070	0		4	٥	0.0
Peer performance within country	0					_		ROTA	0		0		4	0	
Polity IV	0		0		6			Board gender diversity	0		0		4	0	
Board gender diversity	0	0.0%	0	0.0%	6	0	0.0%	Voice and accountability	0	0.0%	0	0.0% LABOUR	4	0	0.09
Independent variables	Total Positive & Significant	% total models positive and	Total Negative & Significant	% total models negative	Total models	Total significant	% total models	Independent variables	Total Positive &	% total models positive and	Total Negative &	% total models negative	Total	Total	% total models
	Jigiiiicanic	significant	Significant	and significant			significant		Significant	significant	Significant	and significant	models	significant	significan
Firm size	2	significant 100.0%	Significant	significant	2	2		Lag dependent variable	Significant 10		Significant 0		models 10	significant	
	2	100.0%	0	significant 0.0%			100.0%	Lag dependent variable		significant 100.0%	0	significant 0.0%	10	0	100.0
Lag dependent variable	2 2	100.0% 100.0%	0	significant 0.0% 0.0%	2	2	100.0%	Business regulation	10	significant 100.0% 0.0%	0 7	significant 0.0% 70.0%	10 10	0	100.0
Lag dependent variable Business regulation	2 2	100.0% 100.0% 0.0%	0 0	significant 0.0% 0.0% 50.0%	2	2	100.0% 100.0% 50.0%	Business regulation Peer performance within industry	10	significant 100.0% 0.0% 70.0%	0 7 0	significant 0.0% 70.0% 0.0%	10 10 10	10	100.0 70.0 70.0
Lag dependent variable Business regulation Credit market regulation	2 2 0	100.0% 100.0% 0.0% 50.0%	0 0 0 1 1 0	significant 0.0% 0.0% 50.0% 0.0%	2	2 1 1	100.0% 100.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country	10 0 7	significant 100.0% 0.0% 70.0% 0.0%	0 7 0 4	significant 0.0% 70.0% 0.0% 40.0%	10 10 10 10	10 7	100.0 70.0 70.0 40.0
Lag dependent variable Business regulation Credit market regulation Extractive industry	2 2 0	100.0% 100.0% 0.0% 50.0% 50.0%	0 0 1 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0%	2 2 2 2	2 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size	10 0 7	significant 100.0% 0.0% 70.0% 0.0% 40.0%	0 7 0 4	significant 0.0% 70.0% 0.0% 40.0% 0.0%	10 10 10 10 10	10 7	100.0 70.0 70.0 40.0 40.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs	2 2 0	100.0% 100.0% 0.0% 50.0% 50.0% 50.0%	0 0 1 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0%	2 2 2 2 2	2 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales	10 0 7 0 4	significant 100.0% 0.0% 70.0% 0.0% 40.0% 30.0%	0 7 0 4 0	significant 0.0% 70.0% 0.0% 40.0% 0.0%	10 10 10 10 10 10	10 7 7 4 4	100.0 70.0 70.0 40.0 40.0 40.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation	2 2 0 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 50.0%	0 0 1 0 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 50.0% 50.0%	2 2 2 2 2 2 2	2 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality	10 0 7 0 4 3	significant 100.0% 0.0% 70.0% 0.0% 40.0% 30.0% 40.0%	0 7 0 4 0 1	significant 0.0% 70.0% 0.0% 40.0% 0.0% 10.0%	10 10 10 10 10 10 10	10 7 7 4 4 4	100.0 70.0 70.0 40.0 40.0 40.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010	2 2 0 1 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 50.0% 0.0%	0 0 0 1 0 0 0 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 50.0% 50.0%	2 2 2 2 2 2 2 2	1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV	10 0 7 0 4 3 4 3	significant 100.0% 0.0% 70.0% 0.0% 40.0% 40.0% 30.0% 40.0% 30.0%	0 7 0 4 0 1 0	significant 0.0% 70.0% 0.0% 40.0% 10.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10	10 7 7 4 4 4 4	100.0 70.0 70.0 40.0 40.0 40.0 40.0 30.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010 Peer performance within country	2 2 0 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 50.0% 0.0% 0.0%	0 0 0 1 0 0 0 0 1 1 1	significant 0.0% 0.0% 50.0% 0.0% 0.0% 50.0% 50.0% 50.0%	2 2 2 2 2 2 2 2 2	1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant	10 0 7 0 4 3	significant 100.0% 0.0% 70.0% 0.0% 40.0% 40.0% 30.0% 30.0% 30.0%	0 7 0 4 0 1 1 0 0	significant 0.0% 70.0% 70.0% 40.0% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10	10 7 7 4 4 4	100.0 70.0 70.0 40.0 40.0 40.0 40.0 30.0 30.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010 Peer performance within industry Peer performance within industry	2 2 0 1 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 0.0% 0.0% 50.0%	0 0 0 0 0 0 0 1 1 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation	10 0 7 0 4 3 4 3 3 2	significant 100.0% 0.0% 70.0% 10.0% 40.0% 30.0% 40.0% 30.0% 20.0%	0 7 0 4 0 1 1 0 0	significant 0.0% 70.0% 0.0% 40.0% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10	10 7 7 4 4 4 4 3 3 3	100.0 70.0 70.0 40.0 40.0 40.0 40.0 30.0 30.0 20.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability	2 2 0 1 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 0.0% 0.0% 50.0% 50.0%	0 0 0 0 0 0 0 1 1 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 50.0% 50.0% 0.0%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry	10 0 7 0 4 3 3 4 3 3 2 2	significant 100.0% 0.0% 70.0% 40.0% 30.0% 40.0% 30.0% 20.0%	0 7 0 4 0 1 1 0 0 0	significant 0.0% 70.0% 0.0% 40.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10 10 10	10 7 7 4 4 4 4 3 3 2 2	100.0 70.0 70.0 40.0 40.0 40.0 30.0 30.0 20.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability Regulatory quality	2 2 0 1 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 0.0% 0.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 50.0% 0.0%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation	10 0 7 0 4 3 3 4 3 2 2	significant 100.0% 0.0% 70.0% 0.09% 40.0% 30.0% 40.0% 30.0% 20.0% 20.0% 0.0%	0 7 0 4 0 1 0 0 0 0	significant 0.0% 70.0% 0.0% 40.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10 10 10	10 77 77 4 4 4 4 3 3 3 2 2	100.0 70.0 70.0 40.0 40.0 40.0 30.0 30.0 20.0 20.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOS Labour market regulation Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability Regulatory quality Regulatory quality ROTA	2 2 0 1 1 1 1 0	100.0% 100.0% 0.0% 50.0% 50.0% 0.0% 0.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 0 0 0 0 1 1 1 0 0 0 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010	10 0 7 0 4 3 3 4 3 3 2 2	significant 100.0% 0.0% 70.0% 40.0% 40.0% 30.0% 40.0% 30.0% 20.0% 0.0% 0.0%	0 77 0 4 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	significant 0.0% 70.0% 0.0% 40.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 7 7 4 4 4 4 3 3 2 2 2	100.0 70.0 70.0 40.0 40.0 40.0 30.0 30.0 20.0 20.0 20.0 20.0
Lag dependent variable Business regulation Credit market regulation Credit market regulation Estractive industry Global NGOS Labour market regulation Network launch by 2010 Peer performance within industry Political stability Regulatory quality ROTA ROTA Board gender diversity	2 2 0 1 1 1 1 0	100.0% 100.0% 50.0% 50.0% 50.0% 0.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 0.0% 50.0% 50.0% 0.0%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010 Political stability	10 0 7 0 4 3 3 4 3 2 2	significant 100.0% 0.0% 70.0% 70.0% 40.0% 30.0% 40.0% 30.0% 20.0% 0.0% 0.0% 10.0%	0 77 0 4 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	significant 0.0% 70.0% 0.0% 40.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 7 7 7 4 4 4 4 3 3 2 2 2 2 2	100.0 70.0 70.0 40.0 40.0 40.0 30.0 20.0 20.0 20.0 20.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOS Labour market regulation Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability Regulatory quality Regulatory quality Board gender diversity Years as UNGC participant	2 2 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 0.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010 Political stability ROTA ROTA ROTA ROTA ROTA ROTA ROTA ROTA	10 0 7 0 4 4 3 3 3 2 2 0 0	significant 100.0% 0.0% 70.0% 40.0% 30.0% 40.0% 30.0% 20.0% 0.0% 10.0% 20.0%	0 77 0 4 0 0 11 0 0 0 0 0 0 0 2 2 2 2	significant 0.0% 70.0% 0.0% 40.0% 0.0% 0.0% 0.0% 0.0% 0.0%	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 7 7 4 4 4 4 3 3 3 2 2 2 2 2 2	100.0 70.0 40.0 40.0 40.0 40.0 30.0 30.0 20.0 20.0 20.0 20.0 20.0 2
Lag dependent variable Business regulation Credit market regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Wetwork launch by 2010 Peer performance within industry Political stability RGOTA Board gender diversity Years as UNGC participant Vears as UNGC participant	2 2 0 0 1 1 1 1 0 0 0 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0% 50.0% 0.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 50.0% 50.0% 0.0% 0.0% 50.0% 0.0%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010 Political stability ROTA Voice and accountability	10 0 7 0 4 3 3 4 3 2 2	Significant 100.0% 0.0% 70.0% 40.0% 40.0% 30.0% 40.0% 0.0% 0.0% 10.0% 0.0% 0.0% 0.0% 0.0%	0 77 0 4 4 0 0 0 0 0 0 0 0 0 2 2 1 1	significant 0.0% 70.0% 0.0% 40.0% 10.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	100 100 100 100 100 100 100 100 100 100	10 7 7 7 7 4 4 4 4 4 4 4 3 3 3 2 2 2 2 2 2 2 2 2 2	100.0 70.0 70.0 40.0 40.0 40.0 30.0 20.0 20.0 20.0 20.0 20.0 20.0 2
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOS Labour market regulation Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability ROTA Board gender diversity Years as UNGC participant Developed country Developed country	2 2 2 2 0 0 1 1 1 1 1 1 1 1 1 1 0 0 0 0	100.0% 100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 1 1 0 0 0 0 1 1 1 1 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 50.0% 0.0%	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010 Political stability ROTA Voice and accountability Inward FDI	10 0 7 0 4 4 3 3 3 2 2 0 0	Significant 100.0% 0.0% 0.0% 40.0% 40.0% 30.0% 40.0% 20.0% 20.0% 10.0% 10.0% 10.0% 10.0% 10.0%	0 77 0 4 4 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 0	significant 0.0% 70.0% 1	100 100 100 100 100 100 100 100 100 100	100 77 44 44 43 33 32 22 22 22 22 22 22 22	100.0 70.0 70.0 40.0 40.0 40.0 30.0 30.0 20.0 20.0 20.0 20.0 20.0 10.0
Lag dependent variable Business regulation Credit market regulation Credit market regulation Extractive industry Global NGOs Labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability ROTA Board gender diversity Years as UNGC participant Developed country Foreign sales per total sales Inward FDI Inw	2 2 2 2 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 0.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 100.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Tears as UNGC participant Credit market regulation Extractive industry Lubour market regulation Network launch by 2010 Political stability ROTA Voice and accountability Inward FDI	100 00 77 00 44 33 33 22 22 20 00 01 11	Significant 100.0% 0.0% 0.0% 10.0% 40.0% 40.0% 30.0% 20.0% 20.0% 0.0% 0.0% 10.0% 10.0% 10.0%	0 77 0 0 4 4 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 0 0 0 0	significant 0.0% 70.0% 70.0% 1	100 100 100 100 100 100 100 100 100 100	10 7 7 7 7 4 4 4 4 4 3 3 3 2 2 2 2 2 2 2 2 2 2 2 1 1 1 1	100.0 70.0 70.0 40.0 40.0 40.0 30.0 20.0 20.0 20.0 20.0 20.0 10.0 10.0
Lag dependent variable Business regulation Credit market regulation Extractive industry Global NGOS Labour market regulation Rework labour market regulation Network launch by 2010 Peer performance within country Peer performance within industry Political stability ROTA SOOTA GOOD deep redit of the country Person of the country Peer performance within industry Political stability ROTA SOOTA GOOD deep redit of the country Peers as UNGC participant Developed country Peers as UNGC participant	2 2 2 2 0 0 1 1 1 1 1 1 1 1 1 1 0 0 0 0	100.0% 100.0% 50.0% 50.0% 50.0% 0.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0% 50.0%	0 0 1 1 0 0 0 0 1 1 1 1 0 0 0 0 0 0 0 0	significant 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100.0% 50.0%	Business regulation Peer performance within industry Developed country Firm size Foreign sales per total sales Regulatory quality Polity IV Years as UNGC participant Credit market regulation Extractive industry Labour market regulation Network launch by 2010 Political stability ROTA Voice and accountability Inward FDI	10 0 7 0 4 4 3 3 3 2 2 0 0	Significant 100.0% 0.0% 0.0% 40.0% 40.0% 30.0% 40.0% 20.0% 10.0% 10.0% 10.0% 10.0% 10.0% 10.0% 10.0%	0 77 0 4 4 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2 2 0	significant 0.0% 70.0% 1	100 100 100 100 100 100 100 100 100 100	100 77 44 44 43 33 32 22 22 22 22 22 22 22	30.0 20.0 20.0 20.0 20.0 20.0 20.0

The table that follows shows how often the independent variables were significant for the models that had the existence of policies as the dependent variable, and those that had processes of implementation as the dependent variable:

Table 32: Summary of drivers for the existence of policies and implementation

		% total	Total	% total			
I	Total	models	negative	models	Total	Total	% Total
Improvements in policies	positive and	positive and	and	negative	models	significant	models
	significant	significant	significant	and	illoueis	Significant	significant
		Significant	Significant	significant			
Lag dependent variable	10	100.0%	0	0.0%	10	10	100.0%
Firm size	8	80.0%	0	0.0%	10	8	80.0%
Business regulation	0	0.0%	6	60.0%	10	6	60.0%
Peer performance within industry	6	60.0%	0	0.0%	10	6	60.0%
Extractive industry	4	40.0%	0	0.0%	10	4	40.0%
Regulatory quality	4	40.0%	0	0.0%	10	4	40.0%
Peer performance within country	3	30.0%	0	0.0%	10	3	30.0%
Credit market regulation	2	20.0%	0	0.0%	10	2	20.0%
Foreign sales per total sales	2	20.0%	0	0.0%	10	2	20.0%
ROTA	2	20.0%	0	0.0%	10	2	20.0%
Years as UNGC participant	2	20.0%	0	0.0%	10	2	20.0%
Developed country	0	0.0%	1	10.0%	10	1	10.0%
Global NGOs	1	10.0%	0	0.0%	10	1	10.0%
Labour market regulation	0	0.0%	1	10.0%	10	1	10.0%
Political stability	1	10.0%	0	0.0%	10	1	10.0%
Polity IV	1	10.0%	0	0.0%	10	1	10.0%
Voice and accountability	0	0.0%	1	10.0%	10	1	10.0%
Board gender diversity	0	0.0%	0	0.0%	10	0	0.0%
Inward FDI	0	0.0%	0	0.0%	10	0	0.0%
Network launch by 2010	0	0.0%	0	0.0%	10	0	0.0%
~							
1		0/ + = + =	Total	% total			
 	Total	% total	Total	% total models	T-4-1	Takal	% Total
Improvements in processes of	Total positive and	models	negative	models	Total	Total	% Total models
Improvements in processes of implementation	positive and	models positive and	negative and	models negative	Total models	Total significant	models
		models	negative	models negative and			
implementation	positive and	models positive and	negative and	models negative and significant			models significant
implementation  Business regulation	positive and significant	models positive and significant 0.0%	negative and significant	models negative and significant 100.0%	models	significant	models significant 100.0%
implementation  Business regulation Lag dependent variable	positive and significant	models positive and significant	negative and significant	models negative and significant	models 9	significant 9	models significant
implementation  Business regulation Lag dependent variable Peer performance within industry	positive and significant  0	models positive and significant  0.0% 100.0%	negative and significant 9	models negative and significant 100.0%	models 9	significant 9 9 7	models significant 100.0% 100.0%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality	positive and significant  0 9	models positive and significant  0.0% 100.0% 77.8%	negative and significant 9 0	models negative and significant 100.0% 0.0%	models 9 9	significant 9	models significant 100.0% 100.0% 77.8%
implementation  Business regulation  Lag dependent variable  Peer performance within industry  Regulatory quality  Years as UNGC participant	positive and significant  0  7	models positive and significant  0.0% 100.0% 77.8% 77.8%	negative and significant 9 0	models negative and significant 100.0% 0.0% 0.0%	9 9 9 9	significant  9  9  7	models significant 100.0% 100.0% 77.8% 77.8%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation	positive and significant  0  9  7  6	models positive and significant 0.0% 100.0% 77.8% 77.8% 66.7%	negative and significant 9 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0%	9 9 9	significant  9  9  7  7  6	models significant 100.0% 100.0% 77.8% 77.8% 66.7%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country	positive and significant  0 9 7 7 6 4 0 0	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 0.0%	negative and significant 9 0 0 0 0 0 0 4	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.0% 44.4%	9 9 9 9 9 9	9 9 7 7 6 6 4 4	models significant 100.0% 100.0% 77.8% 77.8% 66.7% 44.4%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size	positive and significant  0  9  7  7  6	models positive and significant 0.0% 100.0% 77.8% 77.8% 66.7% 44.4%	negative and significant 9 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.0%	9 9 9 9 9 9	9 9 7 7 6	models significant 100.0% 100.0% 77.8% 77.8% 66.7% 44.4%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation	positive and significant  0  9  7  6  4  0  4	models positive and significant 0.0% 100.0% 77.8% 77.8% 66.7% 44.4% 0.0%	negative and significant 9 0 0 0 0 0 0 0 4 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.0% 44.4% 0.0%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 6 4 4 4 4	models significant 100.0% 100.0% 77.8% 66.7% 44.4% 44.4%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability	positive and significant  0 9 7 7 6 4 0 4	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 0.0% 44.4% 22.2%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4	models significant 100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation	positive and significant  0 9 7 7 6 4 0 4 2	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 0.0% 44.4% 22.2% 33.3%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2% 11.1%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4	models significant 100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA	positive and significant  0 9 7 7 6 4 0 4 2 3 4	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 0.0% 44.4% 22.2% 33.3% 44.4%	negative and significant  9 0 0 0 0 4 0 2 1 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2% 11.1%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	models significant 100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.44 44.44 44.44
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA Foreign sales per total sales	positive and significant  0 9 7 7 6 4 0 4 2 3 4 4	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 0.0% 44.4% 22.2.2% 33.3% 44.4%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.09% 44.4% 0.09% 22.2% 11.1% 0.0%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4 4 4	models significant 100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4% 44.4% 44.4%
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implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA Foreign sales per total sales Network launch by 2010 Global NGOS	positive and significant  0  9  7  7  6  4  2  3  4  4  2  0  0	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 22.2% 33.3% 44.4% 44.4% 22.2% 0.0%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2% 11.1% 0.0% 0.0%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4 4 4 4 3 3 3 3	models significant  100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4% 44.4% 44.4% 33.3% 33.3%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA Foreign sales per total sales Network launch by 2010 Global NGOS Voice and accountability	positive and significant  0 9 77 76 6 44 22 33 44 4 2	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 22.2% 33.3% 44.4% 22.2% 0.0% 11.1%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2% 11.1% 0.0% 11.19 33.3%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 7 6 4 4 4 4 4 4 4 3 3 3 2	models significant  100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4% 44.4% 33.3% 33.3% 22.2%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA Foreign sales per total sales Network launch by 2010 Global NGOS	positive and significant	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 22.2% 33.3% 44.4% 22.2% 0.0% 11.1% 0.0%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 11.1% 0.0% 11.11% 0.0% 11.11% 22.2%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4 4 3 3 3 2 2	models significant  100.0%  77.8%  66.7%  44.4%  44.4%  44.4%  44.4%  33.3%  33.3%  22.2%
implementation  Business regulation Lag dependent variable Peer performance within industry Regulatory quality Years as UNGC participant Credit market regulation Developed country Firm size Labour market regulation Political stability Polity IV ROTA Foreign sales per total sales Network launch by 2010 Global NGOs Voice and accountability Board gender diversity	positive and significant 0 0 9 7 7 7 6 4 0 0 4 2 2 3 3 4 4 2 2 0 0 1 1 0 0 1	models positive and significant 0.0% 100.0% 77.8% 66.7% 44.4% 22.2% 33.3% 44.4% 22.2% 0.0% 11.1% 0.0% 11.1%	negative and significant 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	models negative and significant 100.0% 0.0% 0.0% 0.0% 44.4% 0.0% 22.2% 11.1% 0.0% 11.19 33.3% 11.11% 22.2%	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	9 9 7 7 6 4 4 4 4 4 4 3 3 3 2 2 1	models significant  100.0% 100.0% 77.8% 66.7% 44.4% 44.4% 44.4% 44.4% 33.3% 33.3% 22.2% 22.2%

Table 33: Summary of drivers for outcomes

Improvements in outcomes	Total positive and significant	% total models positive and significant	Total negative and significant	% total models negative and significant	Total models	Total significant	% Total models significant
Lag dependent variable	3	75.0%	0	0.0%	4	3	75.0%
Peer performance within industry	2	50.0%	0	0.0%	4	2	50.0%
Peer performance within country	1	25.0%	0	0.0%	4	1	25.0%
Credit market regulation	1	25.0%	0	0.0%	4	1	25.0%
Inward FDI	1	25.0%	0	0.0%	4	1	25.0%
Firm size	0	0.0%	0	0.0%	4	0	0.0%
Business regulation	0	0.0%	0	0.0%	4	0	0.0%
Extractive industry	0	0.0%	0	0.0%	4	0	0.0%
Regulatory quality	0	0.0%	0	0.0%	4	0	0.0%
Foreign sales per total sales	0	0.0%	0	0.0%	4	0	0.0%
ROTA	0	0.0%	0	0.0%	4	0	0.0%
Years as UNGC participant	0	0.0%	0	0.0%	4	0	0.0%
Developed country	0	0.0%	0	0.0%	4	0	0.0%
Global NGOs	0	0.0%	0	0.0%	4	0	0.0%
Labour market regulation	0	0.0%	0	0.0%	4	0	0.0%
Political stability	0	0.0%	0	0.0%	4	0	0.0%
Polity IV	0	0.0%	0	0.0%	4	0	0.0%
Voice and accountability	0	0.0%	0	0.0%	4	0	0.0%
Board gender diversity	0	0.0%	0	0.0%	4	0	0.0%
Network launch by 2010	0	0.0%	0	0.0%	4	0	0.0%

Finally, the table above summarises the results for the variables representing outcomes.

# 7.5 Discussing the hypotheses

It is now important to discuss the results in light of the hypotheses proposed in this chapter. Hypothesis 01 is partially supported as the presence of NGOs was only found to influence improvement in performance in 3 out of the 26 models, i.e. for three of the 26 dependent variables. In addition, while it was positively associated with increasing the odds of firms performing better in human rights policies and implementation of anti-corruption efforts, it was associated with decreasing odds of firm showing implementation of its green innovation efforts.

Table 34: Discussion of hypotheses for the first set of models

Hypotheses	Status
Hypothesis 01: Firms headquartered in countries with a large number of NGOs that are interested in corporate social performance (i.e. that are UNGC participants) will be more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 02: Firms headquartered in developed countries will be more likely to display higher performance in the UNGC issues.	Not supported
Hypothesis 03: Firms with a more diverse board are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 04: Firms are more likely to display higher performance in an UNGC issue if other firms in its home country are also performing high in that issue.	Partially supported
Hypothesis 05: Firms are more likely to display higher performance in an UNGC issue if other firms in its industry are also performing high in that issue.	Partially supported

Hypothesis 06: Firms headquartered in countries with high FDI are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 07: Firms that are highly internationalised are more likely to display higher performance in the UNGC issues	Partially supported
Hypothesis 08: Firms headquartered in countries with good domestic governance institutions are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 09: Firms headquartered in countries with a more democratic political system are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 10: Firms headquartered in countries with more stringent regulation are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 11: UNGC network launch in firm's home country is not associated with higher performance in the UNGC issues.	Partially supported
Hypothesis 12: Firms in high impact industries are more likely to display higher performance in the UNGC issues.	Partially supported
Hypothesis 13: Larger firms are more likely to display higher performance in the UNGC issues.	Partially supported

Hypothesis 02 is not supported, as whenever it was significant, the coefficient was negative, i.e. the fact that the firms' home country was a developed economy decreased the odds of improved performance. That was the case for evidence of implementation of freedom of association, forced labour, child labour and human rights policies in the supply chain. It was also true for the existence of a freedom of association policy. Hypothesis 03 is also partially supported as board diversity only significantly influenced the odds of performance for one variable (implementation of anti-corruption efforts).

Hypothesis 04 is only partially supported as peer pressure at home country was found to significantly increase the odds of improved performance for five variables only, namely: governance score, philanthropy, and existence of policies on diversity, anti-corruption and human rights on the supply chain. Hypothesis 05 is partially supported, as peer pressure at industry level was found to significantly increase the odds of improved performance for 65.4% of the variables (17 in total). Hypothesis 06 is partially supported, as higher levels of inward FDI were only significant for four dependent variables, and for three of those the coefficient was zero, making it challenging to make any statements on its influence on performance. Hypothesis 07 is also partially supported either as while firm internationalisation was significant for 26.9% of the performance variables, it had a negative coefficient in nearly a third of the cases, which does not support the hypothesis.

Hypothesis 08 is only partially supported. While performance variables were positively and significantly influenced by at least one of the national governance indicators in 17 instances, in 6 cases good governance was associated with poorer performance. Similarly for hypothesis 09, only partial support was found. Higher levels of democracy were positive and significant for six variables only. Hypothesis 10 is not fully supported. While at least one of the variables for stringency of regulation was significant for 65.4% of the performance variables, they varied in positive and negative coefficients, i.e. being either more or less stringent regulation and therefore not always in line with the hypothesis.

Hypothesis 11 is partially supported. Presence of a local network was only significant for three of the performance variables, but all three had negative coefficients, in line with the hypothesis. Hypothesis 12 is also only partially supported. Belonging to an extractive industry is positive and significant for five performance variables only. Hypothesis 13 is partially supported, with size having a positive and significant in impact on 57.7% of the performance variables.

# 7.6 Discussion and Conclusion

This chapter aimed at understanding the drivers for corporate social performance amongst UNGC participants. Using a sub-sample to include only UNGC participants, this study used a longitudinal approach to understand what factors at firm, industry and national levels influenced performance in the UNGC principles amongst participating firms. Performance variables were classified as the existence of policies – understood as a statement of firms' principles and intentions, processes – whether the firm is actually implementing its policies, and whenever possible outcomes – the visible result of the implementation of these policies.

Referring back to the framework proposed in chapter two (section 3.3.2), results suggest that elements of "who I am", "what I do" and "where I come from" are at play in influencing improvements in performance amongst UNGC participants<sup>16</sup>. More specifically, results suggest that, overall, larger firms with a good history of previous corporate social performance, that are from an industry where competitive pressures for higher corporate social performance are stronger, and that come from countries with more stringent business regulation will be more likely to display improvements in performance.

<sup>16</sup> This considers only variables that were significant for over 50% of the full models.

Improvements in performance in regards to the existence of policies are mainly driven by "who I am", notably in terms of size and previous performance. In other words, results suggest that bigger firms with a good story to tell about what they have done before are more likely to develop policies related to the UNGC issue areas. Those firms are likely to be under greater scrutiny from stakeholders, and failing to keep a promise may come at a high cost for them. The BP Deepwater Horizon accident is arguably illustrative of the level of scrutiny these firms may attract and the impact of perception that performance is below expectations. Nevertheless, what peers within industry are doing is also an important driver in most cases, as well as a national environment with a more stringent business regulation, i.e. countries where regulation and costs of bureaucracy are likely to restrain entry and reduce competition. It may be that firms in those countries feel compelled to show proactive engagement in corporate social performance to try to pre-empt further regulations.

Improvements in regards to processes of implementation, on the other hand, have a slightly bigger influence from the national environment – where I come from - when compared to policies, with both more stringent business regulation and higher regulatory quality as significant for most performance variables. It may be that implementation requires a higher level of commitment to the promises made than policies – "easier said than done" as the adage goes. Therefore, where a set of institutions exists at national level that can create the environment to hold firms more accountable one should be able to see better performance results in the implementation front. In other words, in a mirror effect, a stronger set of institutions at national level – where I come from - may increase the costs of failing to keep a promise, therefore leading to higher levels of implementation of these promises.

Peer performance at industry level is associated with improvements in implementation in most cases, with firms more likely to give the extra step towards better performance when the industry performs better. While this may be more acutely visible in regards to implementation, results suggest mimetic pressures within industry to be stronger than country level ones throughout. Peers' performance at industry level has an important role in defining participants' performance in regards to policies, implementation and outcomes. It is interesting that this is stronger at industry level than country level, although it is not necessarily surprising given the global nature of the UNGC and the fact that, in theory, firms may be encouraged to mimic the behaviour of other organisations perceived by them as successful (and therefore legitimate). One could argue that firms may be more likely to look up to

peers within the same industry, who are exposed to similar challenges. If a firm is under performing its peers, the cost of failing to keep a promise in regards to this performance may be high, as it may have direct implications for its business as well. Therefore, participants may tend to mimic their way into higher performance when its industry as a whole is displaying higher performance in the UNGC issues.

Interestingly, time as a participant in the UNGC is more relevant for improvements in the implementation of processes than in the establishment of policies. A longer time as a participant is likely to lead to higher improvements in performance. In very few cases it is associated with improvements in policies. One can argue that by being longer in the initiative the firm has been longer exposed to best practices and to peers' practices in general in regards to the UNGC principles, therefore being longer exposed to peer pressure to higher performance. In addition, participating firms will have the time to learn more about how to transform commitments into practical actions, through the learning efforts of the UNGC.

# 7.7 Contribution to practice and to theory

This study makes an important contribution to theory by using a multi-issue measure of performance, longitudinally covering all UNGC principles in the aspects of policies, processes of implementation and whenever feasible outcomes. To the author's best knowledge no other study on the UNGC offered the same breadth of variables to measure participant's performance in the initiative.

The empirical evidence of the strong mimicking behaviour element, seen through the important impact of peer performance in participants' performance, notably at industry level, makes for relevant information for practitioners. This highlights the relevance of strategies of profiling "champions" of the initiative, as well as the sharing of good practices in different spaces (meetings, websites, publications, for example), as these are likely to push more participants into mimicking their way into better performance.

# 7.8 Limitations and future research

The choice of dependent variables is at the same time a strength of this study, as it offers a wider set of issues and covers all UNGC principles and therefore makes an important contribution to the literature, but also a limitation, in the sense that the choice of variables is constrained by their availability. The ASSET4 data starts in 2002. While these are the early days of the UNGC, it would have been useful to have

data going back to the year the initiative was launched and the first firms joined, or even before. In addition, a number of outcome variables, especially variables covering controversies (as a proxy for bad and externally recognised outcome) and awards (as a proxy for good and externally recognised outcome) were not consistently available and as a result could not be used.

It is also important to highlight that while every effort was made to choose dependent variables that were aligned with the UNGC principles and with theory, there is not a one set of variables that are widely accepted as representing performance in the initiative. Therefore, choice is not only guided by data availability, as explained above, but also, to some extent, by a certain degree of discretion from the author. It would be interesting for future studies to run further tests with a different set of performance variables, covering the same issues and principles, to compare results. Finally, ASSET4's universe covers large listed firms, which does not represent the full of UNGC participants, given that a significant proportion of those are small and medium enterprises. Therefore, it would be interesting to develop a similar study using a sample of small firms, for example.

# 7.9 Summary and next chapter

This chapter aimed at understanding the drivers for corporate social performance amongst UNGC participants. Its starts from the observation that while all UNGC participants make a commitment to implement the 10 principles into their operations, actual performance will vary across firms, with some failing to keep this promise while others do it well enough to have its actions portrayed as best practices. Using a sub-sample to include only the firms that were UNGC participants, this study used a longitudinal approach to understand what factors at firm, industry and national levels influence performance in the UNGC amongst participating firms.

The empirical evidence suggests that elements at firm, industry and country levels may influence this outcome, when institutional pressures of some guise make it more or less costly for participants to fail to keep a promise. Results suggest that, overall, elements of "who I am", "what I do" and "where I come from" are at play in influencing improvements in performance amongst UNGC participants. More specifically, this means that larger firms with a good history of previous corporate social performance, from an industry where competitive pressures for higher corporate social performance are stronger, and that come from countries with more stringent business regulation will be more likely to display improvements in performance.

Looking separately into policies and implementation, improvements on the development of policies in the UNGC issue areas are arguably more driven by "who I am" or more specifically firms' size and previous performance. Improvements to the implementation of these policies, however, have a greater impact from their national institutional framework, especially in regards to the regulatory environment. It is argued that implementation may require a higher level of commitment from firms and therefore more is needed to ensure promises are kept. Therefore, where a set of institutions exists at national level that can create the environment to hold firms more accountable one should be able to see better performance results in the implementation front.

The next chapter builds on this one and with a broader sample - including UNGC participants and non-participants - seeks to understand the extent to which participation in the UNGC shapes firms' performance in the issue areas and principles of the initiative. Chapter seven will also use the knowledge acquired in chapter six in regards to institutional factors that may influence performance to choose the control variables.

# 8 Chapter 7: Walking the talk: does joining the UNGC lead to actual improvements in CSP?

Interest on voluntary CSR initiatives has increased over time. While their popularity has grown, so has the debate on whether they are actually capable of influencing corporate behaviour. A major criticism of these initiatives is that their voluntary nature allows for varied levels of engagement, often resulting in no significant improvement in firms' corporate social performance (Behnam and MacLean, 2011). A number of authors have explored this question empirically. Studies, however, point to conflicting and contradictory results, with initiatives being placed anywhere on a continuum from having no impact to having significant impact on corporate behaviour (Barla, 2007, Toffel, 2005, King et al., 2005, Chen and Bouvain, 2009, Runhaar and Lafferty, 2009).

Particular focus has been placed on the UNGC's ability to shape corporate behaviour in regards to CSP. The UNGC being the largest CSR initiative in the world (Arevalo et al., 2013), the impact it has on performance has been a major concern for academics and practitioners alike. The initiative has often been accused of not "having teeth", i.e. not having the means of ensuring substantive responsible corporate behaviour consistent with the principles participants sign up for. Surprisingly though, only a small number of studies have tackled this question empirically, and often with a limited sample or a measure of performance that did not encompass the full spectrum of UNGC issues. As discussed in chapter two (section 3.3.3), results found were mixed, with some acknowledging the UNGC impact on firm behaviour, while others positing that the initiative was weak at best in influencing corporate action (Runhaar and Lafferty, 2009, Baumann and Scherer, 2010, Hamann et al., 2009, Chen and Bouvain, 2009). While this discussion remains open, enough evidence exists on the variation on performance across participants, highlighting the importance of further exploring this question.

This study aims at addressing this open question analysing whether joining the UNGC is associated with increased corporate social performance. Through a longitudinal, cross-national and multi-industry analysis of performance of UNGC's participants, it will look into questions of issue salience, impact of time of participation in performance, and how participants and non-participants compare in their CSP overtime. In addition to addressing an unresolved question, it can make an important contribution to the literature by using a multi-issue measure of performance in the

UNGC, arguably allowing for a more solid understanding of the initiative's impact on participants' corporate social performance.

# 8.1 Understanding the impact of the UNGC on performance

Voluntary CSR initiatives – specially certified standards, but to a greater or lesser extent all of them – are implicitly seen as a tool to generate homogeneity in CSP across firms (Yin and Schmeidler, 2009). Understanding this phenomenon through institutional lenses reinforces this perception of isomorphism as this theoretical strand focuses on the role of coercive, mimetic and normative pressures in leading organisations to adopt similar practices and behaviour overtime (Yin and Schmeidler, 2009). One would expect that firms that join an initiative such as the UNGC would be exposed to such pressures to deliver on commitments made and improve performance. The literature and practice show, however, that the way firms choose to – or are capable of – implement commitments may vary significantly (Yin and Schmeidler, 2009), resulting in different outcomes.

# 8.1.1 Substantive and symbolic engagement

When firms decide to join a voluntary CSR initiative, they commit to abide to the principles, norms or standards proposed by that initiative. Firms are then subject to normative, mimetic or coercive forces to conform to those proposed norms or activities. Oliver (1991) suggests, however, that conforming is not the only available choice for an organisation faced with institutional pressures. Possible responses vary according to the level of resistance to institutional demands and may range from acquiesce, to compromise, avoidance, defiance and manipulation (Oliver, 1991). Organisations' willingness, capacity and ability to conform will drive their response to the institutional demands.

While the expected outcome is substantive implementation, i.e. a consistent and committed incorporation of the proposed activities or norms into the business practices, in practice it can be observed that corporate behaviour post-joining varies greatly. For one thing, firms often find themselves compelled to adopt a practice or structure to maintain its legitimacy, even if adopting it goes against the organisation's immediate (or long run) efficiency needs (Meyer and Rowan, 1977) or management priorities and interests (Crilly et al., 2012). In such cases, organisations may often resort to decoupling, i.e. giving the impression of adopting the legitimated structure, while carrying on with their own practices (Meyer and Rowan, 1977).

Similarly, it has been theorised that ceremonial adoption of an initiative is more likely to occur in a scenario where there is high uncertainty about the benefits of a practice, combined with strong pressure for adoption in views of protecting legitimacy (Kostova and Roth, 2002). One could argue that this is a highly likely scenario in regards to voluntary CSR initiatives. Benefits of adoption remain ambiguous (Bansal and Bogner, 2002, Darnall and Sides, 2008). For one thing, while some firms may publicise high savings following the implementation of Environmental Management Systems (EMS) or after investing in ISO14001 certification, others find the investment not to result on any savings at all (Bansal and Bogner, 2002). At the same time, there is growing interest in voluntary CSR initiatives, which continue growing over the last decades in number of initiatives (Waddock, 2008) and number of participants. The support of key stakeholders - such as governments for example – for such initiatives may exert an important pressure on firms to adopt them (Delmas and Montes-Sancho, 2011).

As reviewed in section 2.1.6.1, decoupling involves the disconnection between the commitments made or the structure the organisation has formally adopted, and the actual practices of this organisation (Hess, 2008, Crilly et al., 2012, Meyer and Rowan, 1977). Meyer and Rowan (1977: 357) proposed that "decoupling enables organisations to maintain standardised, legitimating, formal structures while their activities vary in response to practical considerations." More recent work on symbolic management also appreciates the fact that decoupling may be more nuanced than a "yes-or-no" decision, allowing firms to choose level of compliance in a continuum (Crilly et al., 2012, Kim and Lyon, 2012). In a study on voluntary reporting of greenhouse gas emissions, for example, Kim and Lyon (2012) found that firms would use selective disclosure of performance. Participants generally reported reductions that albeit real, did not show the full picture of an actual increase in total emissions (Kim and Lyon, 2012). Finally, some authors have also proposed that firms may decouple due to a lack of capacity to implement the actions it has committed to (Lim and Tsutsui, 2012, Crilly et al., 2012). For example, Lim and Tsutsui (2012) found that the launch of the UNGC in a developing country may lead to firms adopting the initiative following the launch, but actually lacking the capacity to implement substantive measures.

While the decision on whether to make a substantive or ceremonial commitment lies within the firm, it is proposed here that characteristics of the initiative itself and firms' motivations to join may influence firm's decision as well as define the extent to which

firms are able to choose. In other words, firm's motivations and initiative design may impact firm performance.

# 8.1.2 Motivations to join tempering the relationship between sign up and performance

After firms decide to adopt a standard or join a voluntary initiative, the action that follows may vary significantly. Authors have theorised that firm motivation to join the initiative may temper the relationship between sign up and performance (Boiral, 2007, Yin and Schmeidler, 2009, Boiral and Henri, 2012, Aravind and Christmann, 2010).

#### 8.1.2.1 Early-adopters: Joining as a tool for improved performance

Neo-institutional theory proposes that early adopters, i.e. those that adopt a practice in the early stages of the institutionalisation process, do so in views of achieving improved performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008). Theory also proposes that if a firm adopts a new practice in views of improving performance, that firm is more likely to display substantive commitment to that practice (Delmas and Montes-Sancho, 2010, Naveh et al., 2004), rather than decoupling commitment and implementation. That is also proposed to be the case for voluntary CSR initiatives. Firms that join such initiatives in views of learning or achieving efficiencies at some level (for example, reducing waste), are proposed to be more likely to display higher performance and substantive implementation of the standards or principles they adopted (Naveh et al., 2004, Yin and Schmeidler, 2009, Delmas and Montes-Sancho, 2010).

#### 8.1.2.2 Late-adopters: Joining as a search for legitimacy

Institutional theory also predicts that firms will aim to acquiesce to institutional pressures and conform to the dominant practices within their operating environment in order to obtain legitimacy and ultimately ensure its survival in the long run (Scott, 2008), even when these practices are not fully aligned with technical efficiencies (Aravind and Christmann, 2010). It is proposed that this behaviour is especially observed amongst late-adopters of a practice. As the institutionalisation of a new practice progresses, the decision to adopt it becomes more of a requirement than a choice, as normative and cultural pressures reach a point where non-adopters risk to be seen as deviants from the norm (Scott, 2008, DiMaggio and Powell, 1983). In other words, adopting the new practice becomes more a matter of ensuring

legitimacy following a logic of appropriateness, than achieving efficiency, following a sense of instrumentality (Scott, 2008, DiMaggio and Powell, 1983).

Theory posits that firms that adopt a certain practice with the intent of ensuring legitimacy, rather than efficiency, display a tendency to decouple adoption and implementation. In other words, when faced with an inconsistency between external demands and internal efficiency needs firms may resort to a ceremonial adoption of a practice, i.e. making a commitment to it but not necessarily fully incorporating it into its daily activities (Meyer and Rowan, 1977). In this case, firms aim to accrue the benefits of adoption by obtaining support from relevant stakeholders, while maintaining a different practice within its boundaries (Meyer and Rowan, 1977).

Hypothesis 1: Early adopters of the UNGC are more likely to display higher performance improvements – i.e. substantive commitment to the initiative - than late adopters.

# 8.1.3 Program design and potential impacts on performance

After joining a voluntary CSR initiative, firms are faced with a choice. They may choose to make a ceremonial commitment to the initiative, implementing only the minimum standards to ensure participant status and freeriding for as long as possible. Taking advantage of the fact that much firm action is opaque to stakeholders, firms may hope to gain the legitimacy benefits from the act of joining, without needing to actually go through the sometimes costly and time-consuming process of implementing real change (Crilly et al., 2012, Meyer and Rowan, 1977). Firms may also choose to make a substantive commitment to the initiative, potentially gaining not only on legitimacy but also on efficiency, deriving from improved performance on the issues they have committed to. Besides their own motivations for joining, a number of characteristics of voluntary CSR initiatives may be more or less effective in leading firms to display a substantive commitment. A brief summary of these is presented on the table below, followed by a detailed discussion on each item.

Table 35: Success factors of voluntary CSR initiatives

Area	Influences on corporate performance
Learning	<ul> <li>Opportunity to share best practice (e.g. local network) (Chen and Bouvain, 2009, Rivera et al., 2006, Runhaar and Lafferty, 2009)</li> <li>Technical assistance (Darnall and Sides, 2008, Rivera et al., 2006)</li> <li>Help establish goals and priorities / sustainability agenda (Hamann et al., 2009, Darnall and Sides, 2008)</li> <li>Opportunity to collaborate / interact / network with other stakeholders/ peers (Runhaar and Lafferty, 2009, Schembera, 2012, Darnall and Sides, 2008)</li> </ul>
Transparency / Public Commitment	<ul> <li>Lead to formalised / public commitment (Arimura et al., 2011)</li> <li>Promote transparency (e.g. reporting) (Runhaar and Lafferty, 2009, Darnall and Kim, 2012)</li> </ul>
Integrity Measures	<ul> <li>Sanction mechanisms in place for non-compliance (Schembera, 2012, Behnam and MacLean, 2011, Rivera et al., 2006)</li> <li>Presence of assurance mechanisms (Schembera, 2012, Behnam and MacLean, 2011, Darnall and Kim, 2012, Rivera et al., 2006)</li> </ul>
Peer Pressure	Peer pressure for increased performance amongst "members of the club" (Rivera et al., 2006)
Excludable "club benefits"	Participation offers "excludable club benefits", especially in terms of legitimacy (Rivera et al., 2006, Potoski and Prakash, 2005b)
Other characteristics of the initiative	<ul> <li>Cost of entrance (Schembera, 2012, Potoski and Prakash, 2005b, Behnam and MacLean, 2011, Darnall and Kim, 2012)</li> <li>Clarity of standards (Schembera, 2012, Behnam and MacLean, 2011)</li> </ul>

#### 8.1.3.1 An effective learning tool

A number of learning elements of voluntary CSR initiatives may contribute to substantive commitment and higher performance post-joining, such as: provision of technical assistance (Darnall and Sides, 2008, Rivera et al., 2006), help for participants in the establishment of goals and priorities on their sustainability agenda (Darnall and Sides, 2008, Hamann et al., 2009), opportunity to share best practices, learning from peers' experience (Chen and Bouvain, 2009, Rivera et al., 2006, Runhaar and Lafferty, 2009), and the opportunity to interact, network and ultimately collaborate with other stakeholders and peers to develop or implement sustainability solutions (Darnall and Sides, 2008, Runhaar and Lafferty, 2009, Schembera, 2012). It is proposed that the sharing of best practices may lead to innovation and organisational learning, and finally to the adoption of practices that are more cost efficient and effective than the ones imposed by traditional command-and-control regulation (Rivera et al., 2006). From an institutional perspective, one could also argue that this learning environment may generate normative pressures for

conformance to higher standards of implementation, building on best practices, and therefore a stronger learning element may lead to more substantive commitment. Equally, participants may succumb to mimetic forces, being compelled to adopt best practices shared and displayed by what they may consider more successful peers (Scott, 2008).

The UNGC is essentially a multi-stakeholders learning network, which participants use to share best practices and innovations linked to the ten principles (Rasche, 2009a, Kilgour, 2007). This learning network element has a fundamental role in influencing the behaviour of participants (Kilgour, 2007) and is implemented more broadly through learning events and dialogue, and regionally or at national level through local network events, for example (Rasche, 2009a). Building on this, Schembera (2012) has proposed that the longer a firm has been a participant the longer it has had the opportunity to network and engage with different stakeholders, therefore time of UNGC membership is likely to be associated with more substantive commitment or higher levels of implementation. In like manner, the UNGC 2013 Global Corporate Sustainability Report found that older participants, who have been exposed to the initiative longer, display generally higher performance in the UNGC issues than firms that have only recently joined the initiative (UNGC, 2013d). Given the central role of learning in the UNGC, it would be expected that participants are likely to display substantive behaviour; even more so older participants, as they have been exposed to the pressures of the learning network for a longer period of time.

#### 8.1.3.2 Promoting transparency and accountability

Voluntary CSR initiatives have different design elements aiming at ensuring transparency and accountability. These may be for example a simple public list of participants, which informs stakeholders that a firm has made a public commitment. It may also be, however, an online report or assessment, which will inform relevant stakeholders of the actual performance of the firm in relation to the commitments made. Potoski and Prakash (2005a) propose that information asymmetry between firms and stakeholders may create conditions to ceremonial behaviour or wilful shirking. In other words, if an initiative does not require any form of public disclosure, external stakeholders cannot differentiate between program shirkers and non-shirkers, therefore allowing for symbolic commitment. In this context, authors propose that initiative designs that lead to formalised public commitment and promote transparency are more likely to obtain substantive commitment from participants (Arimura et al., 2011, Runhaar and Lafferty, 2009). When firms are more

visible they are likely to be under greater scrutiny and therefore under greater pressure to demonstrate higher performance (Campbell, 2007, Darnall and Kim, 2012) to protect their legitimacy.

The UNGC, while not having the mandate or the resources to monitor participants' performance, relies on the disclosure of information to hold participants accountable (Rasche, 2009a). Once firms become participants, their details are listed on the UNGC website. Equally, they are required to systematically submit a communication on their progress, which is also made public on the UNGC website. This is expected to lead to a social vetting mechanism through which stakeholders can use this information to hold participants accountable (Rasche, 2009a). This visibility, leading to increasing scrutiny and pressure is arguably likely to lead to substantive engagement.

#### 8.1.3.3 Integrity measures in place to curb shirking

It has also been proposed that integrity measures of different guises may curb ceremonial adoption (Schembera, 2012, Behnam and MacLean, 2011, Rivera et al., 2006, Darnall and Kim, 2012). These measures may also take a number of different forms, such as auditing by third parties, mandatory public disclosure of implementation indicators, and/or sanctions for non-compliance, to name a few. While integrity measures may vary in form and stringency, Potoski and Prakash (2005a) propose that they can be particularly effective if they contain three key elements, namely: third-party monitoring, public disclosure of audit information and sanctioning by program sponsors. These coercive pressures imposed by the programs can arguably ensure compliance with the initiative's obligations, leading to substantive commitment. Firms that do not comply are at risk of sanctions. Participants will be inclined to comply, as these organisations fear to have their shortcomings revealed (Darnall and Kim, 2012), which could arguably impact their legitimacy.

In the case of the UNGC, the initiative has been largely criticised for what its critics see as a lack of compliance monitoring mechanisms (Rasche, 2009a). UNGC critics argue that this could allow participating firms to avoid substantial commitment while still maintaining the legitimacy benefits of participation, for example through association with the UN (Rasche, 2009a). While the initiative does not have the mandate or the resources to verify individual participant performance, it does have some integrity measures in place. For one thing, participants are required to annually

submit a communication on progress (COP) reporting its implementation of the principles. Failing to submit a COP within a year will lead to a "non-communicating" designation on the initiative's website; failing to submit a COP after another year will result in the firm being expelled from the UNGC (UNGC, 2013j). Non-complying firms are named in the UNGC website, and often this information is also captured and diffused in the media. A total of 4,214 participants have been expelled from the initiative to date (UNGC, 2013b). Even tough this is not a monitoring or auditing of performance, it does represent a sanction from program sponsors (Potoski and Prakash, 2005a) which could arguably deter ceremonial behaviour as this "naming and shaming" mechanism may represent a threat to firm's legitimacy. On the other hand, firms could arguably enjoy the benefits of participation without substantial implementation for at least one year but possibly two. Therefore, arguments could be done either way on the extent to which the UNGC's integrity measures are effective in shaping performance.

### 8.1.3.4 Peer pressure for increased performance amongst "members of the club"

It is proposed that joining voluntary CSR initiatives may trigger a socialisation process through which peers exert pressure on one another to create or maintain a collective "green reputation" and trust from their stakeholders (Rivera et al., 2006). Socialisation tactics may include sharing periodic reports on best- and worst-practice among participants, use of symbols such as labels to identify high performing participants, endorsement by key stakeholder such as environmental agencies or NGOs, among others (Rivera et al., 2006). It is proposed that such normative pressures may be an important factor in leading to more substantive commitment (Rivera et al., 2006).

In the case of the UNGC, some socialisation measures can be observed. For one thing, until 2009 the initiative had a Notable COP award program, which recognised participants that had submitted high quality COPs. In January 2011, the UNGC launched the LEAD program, which challenges leading UNGC participants to achieve even higher levels of CSP and recognises them for doing so (UNGC, 2013c). It is argued that such measures may incentivise participants to display substantive commitment to the initiative.

#### 8.1.3.5 Excludable "club benefits"

It has been proposed that joining voluntary CSR initiatives may offer potentially excludable "club benefits" to participants (Potoski and Prakash, 2005b, Rivera et al.,

2006). Therefore, in order to have access to these benefits – generally linked with legitimacy obtained through association with the well-reputed initiative – firms are more likely to take costly, progressive measures to substantially implement the commitments supported by the initiative (Potoski and Prakash, 2005b). For example, Postoski and Prakash (2005b) propose that ISO140001 is successful in promoting higher performance due to the reputational benefits deriving from the broad positive standing the standard has with external stakeholders. Rivera et al (2006) highlight, however, that these benefits may to some extent be non-excludable, leaving initiatives vulnerable to free riding behaviour. If no controls are in place, once the initiative has established a credible "green reputation", all participants regardless of their actual performance may enjoy it, as outcomes may not be fully visible for external stakeholders (Rivera et al., 2006).

In the case of the UNGC, while the initiative may offer excludable benefits for some top performers (for example, the now-discontinued Notable COP award), it arguably also offers non-excludable benefits for participants with all levels of commitment. For one thing, firms only interested on the immediate legitimacy gains associated with joining may manage to maintain participation status without incurring in much effort for at least one year. In this case, the organisation would be able to obtain the legitimacy benefits reserved to participants, without substantial implementation of the principles. Therefore, while the UNGC may offer some excludable benefits, some of the benefits it offers may arguably be enjoyed by participants that are not engaged in substantial implementation.

### 8.1.3.6 Other characteristics of the initiative

It has also been proposed that high costs of adoption and clear standards may lead to substantial commitment to voluntary CSR initiatives (Schembera, 2012, Potoski and Prakash, 2005b, Behnam and MacLean, 2011, Darnall and Kim, 2012).

Theory proposes that organisations are more prone to decouple commitment and action when they feel under pressure to adopt a practice that seems to conflict with their efficiency needs (Meyer and Rowan, 1977). It follows that organisations that are motivated for adoption for legitimacy reasons are also more likely to display ceremonial commitment to the initiative (Behnam and MacLean, 2011). Given the wide choice of voluntary CSR initiatives, it is argued that firms only interested in legitimacy gains are more likely to symbolic adopt initiatives that have the lowest requirements of effort and resources (Behnam and MacLean, 2011). With that,

participants aim to obtain the legitimacy benefits of being a participant, without incurring on high costs. Conversely, it is proposed that initiatives that have high costs of adoption are more likely to have managerial support to maintain the system and achieve the goals the firm commits to (Darnall and Kim, 2012), and are as a result less likely to be decoupled (Schembera, 2012). Equally, those initiatives that have high costs of adoption and cannot be easily decoupled (such as those requiring certification, for example) are more likely to attract firms that are actually prepared to a substantive commitment to the initiative and/or envisage a competitive advantage from full implementation (Behnam and MacLean, 2011).

In the case of ISO14001, costs of certification are high, and are accrued not only at firms' initial certification but also when they re-certify (Darnall and Kim, 2012). In the case of the UNGC, calculation of cost of adoption is less obvious, and therefore has been a point of discussion. Behnam and MacLean (2011) argue that while substantive implementation of the UNGC may require significant effort and resources, firms only interested on the immediate legitimacy gains of becoming a participant may manage to maintain participant status without incurring in many costs. The most costly requirement is the annual production of a COP (Behnam and MacLean, 2011). In a nutshell, it is proposed that only substantive implementation of the UNGC would require higher investments; therefore costs of adoption in this case is not likely to be a deterrent for ceremonial commitment (Behnam and MacLean, 2011).

Clarity of standards has also been pointed as an important factor influencing performance post-joining (Schembera, 2012, Behnam and MacLean, 2011). Behnam and MacLean (2011) propose that ambiguous language in the definition of the standard or principles leave the initiative's requirements open to interpretation, giving participants enough room of manoeuvre to select the level of implementation that better fits their needs. Firms that believe the initiative to be relevant for their efficiency of competitiveness may take advantage of this flexibility to achieve an effective integration of standards into their operations. Conversely, firms that are only focused on the legitimacy gains may use this flexibility to adopt standards to the minimum, decoupling commitments made from its operations, ensuring legitimacy gains while continuing with business as usual. It is therefore proposed that clear and unambiguous language in the definition of the initiative's expectations limits the potential for mere ceremonial commitment to it (Behnam and MacLean, 2011).

The UNGC has been criticised for proposing principles that do not set clear expectations for participants or provide concrete guidance for implementation

(Behnam and MacLean, 2011, Rasche, 2009a). Principles are aspirational, rather than directive (Behnam and MacLean, 2011) and there are concerns that the broad language used in the principles may allow uncommitted participants to claim compliance without taking substantive action (Rasche, 2009a). Rasche (2009a: 17) points, however, that the UNGC does not aim at being a "structured code of conduct against which compliance can be measured"; rather, the principles aim to provide a starting point for learning and discussion, and for the development of innovative solutions for sustainability challenges. In addition, the UNGC is an initiative designed for global reach, making no distinction of industry, size or region; the principles therefore were designed to allow firms to adapt them to their own operating context (Rasche, 2009a). Once again, the discussion in regards to clarity of the standards is not a straightforward one, allowing for different perspectives on the initiative's capacity to influence corporate social performance of participants.

Based on the discussions above, there are reasons to propose that joining the UNGC is likely to be followed both by ceremonial or substantive behaviour. While the UNGC has a number of integrity measures in place, it has been criticised for not having formal monitoring of implementation for example (Rasche, 2009a). The principles have been pointed as broad and unclear (Rasche, 2009a). In regards to cost, there is no agreement on its potential impact on UNGC participants making it difficult to make predictions from this factor (Behnam and MacLean, 2011). The UNGC has socialisation measures in place that can arguably trigger peer pressure for higher performance, and the initiative does offer some excludable club benefits. However, it has also been proposed that some of their adoption benefits are non-excludable – for example, some firms may enjoy the legitimacy gains of joining the initiative, without actually taking many steps to improve performance post-joining. Given these mixed propositions, and the mixed evidence found on the literature, it is important to propose the following hypotheses for testing:

Hypothesis 2: Firms that join the UNGC are more likely to display higher corporate social performance in all issue areas of the UNGC than firms that do not join.

Hypothesis 3: Firms that join the UNGC are more likely to display higher corporate social performance in selected issue areas of the initiative than firms that do not join.

Hypothesis 4: Firms that join the UNGC are not more likely to display higher corporate social performance in the initiative's issue areas than firms that do not join.

#### 8.1.4 Control variables

#### 8.1.4.1 Firm size

Size was often found to be a relevant predictor for CSP (Bennie et al., 2007, Bernhagen and Mitchell, 2010). Despite variations in focus, the underlying argument is that the larger the organisation, the more visible are its actions and therefore more attention and more scrutiny it is likely to receive from stakeholders (Johnstone and Labonne, 2009, Knudsen, 2011, Schembera, 2012). As result of that, larger firms are likely to be under greater pressure to conform to society's expectations in order to protect its legitimacy (DiMaggio and Powell, 1983). It is therefore proposed that larger size is likely to be associated with higher performance in consonance with the commitments made to the UNGC.

#### 8.1.4.2 Slack resources

As discussed in previous chapters, slack resources have been found to have an impact on firms' decision to engage in various elements of CSP (Levy and Shatto, 1978, Melnyk et al., 2003, Perez-Batres et al., 2012a, Waddock and Graves, 1997). Financial resources are arguably essential to allow firms to engage in new endeavours or routines, as they provide firms with the discretion for decision making that a lack of resources would otherwise prevent (Perez-Batres et al., 2012a, McGuire et al., 1988) as well as with the actual resources needed for implementation. Therefore, an organisation that disposes of slack resources will be better placed to substantively implement the principles they sign up for.

#### 8.1.4.3 Belonging to the extractive industry

Firms in extractive industries are likely to face higher stakeholder scrutiny and be under greater pressure to display alignment with societal expectations (Perez-Batres et al., 2012a, Bansal and Bogner, 2002). Such firms may face real losses if their customers or other stakeholders pull back support for them due to poor (real or perceived) sustainability performance (Bansal and Bogner, 2002). Firms in high impact industries, consequently, may find greater incentives to display substantive commitment to voluntary CSR initiatives they choose to join or perceive greater risk of sanctions if behaving otherwise. As a result, one can expect to find higher improvements in performance amongst this group.

#### 8.1.4.4 Good governance

As discussed in previous chapters, it is proposed that good domestic governance institutions will be associated with substantive commitment to voluntary CSR initiatives (Knudsen, 2011). It can be argued that strong domestic governance create the conditions to hold firms' accountable for the commitments they make, therefore leading to substantive implementation of voluntary CSR standards.

#### 8.1.4.5 Stringency of regulation

As discussed before, firms in more liberal economies will tend to engage in voluntary CSR initiatives and work with policymakers to develop such initiatives and frameworks, avoiding government regulations while deflecting criticism and ultimately protecting their legitimacy (Lim and Tsutsui, 2012). While this economic orientation may be associated with higher levels of participation in voluntary CSR initiatives, no evidence was found that it may be associated with higher performance as well (Lim and Tsutsui, 2012). Ultimately, one could use a mirroring argument (Jackson and Apostolakou, 2010) - lower levels of government intervention are likely to lead to poorer CSP, and also in some cases ceremonial commitment to voluntary CSR initiatives.

### 8.1.4.6 Previous performance

Controlling for effects of firms' previous performance is an important element of understanding current performance. One can argue that what the firm did the year before will have an important impact on what the firm is currently doing - for example, if the firm gave a substantial amount of money to charity in the previous year, it is unlikely that it will reduce this amount drastically in the current year. Therefore, it is expected that firms with previous high performance, will also perform higher in the current period.

### 8.1.4.7 Peer pressure and mimicking behaviour

DiMaggio and Powell (1983) highlight that uncertainty is a powerful force in encouraging organisational behaviour towards isomorphism. When there is uncertainty in the environment organisations may be encouraged to mimic the behaviour of other organisations perceived by them as successful (and therefore legitimate), in order to ensure their own legitimacy (DiMaggio and Powell, 1983, Haunschild and Miner, 1997). Building on this, one can argue that the performance of peers, i.e. the performance of other firms within the focal firm's home country or

industry, may influence the focal firm's performance. Firms may find themselves compelled to adopt similar practices – and arguably level of performance – of peers.

### 8.2 Data

This study uses data provided by ThomsonReuters ASSET4, combined with institutional data provided by a number of publicly available sources (see below and chapter three for a full list and description), as well as firm data from Datastream, as well as some UNGC data on participation.

### **8.2.1 Sample**

This study uses the full universe of the ASSET4 dataset between 2002 and 2011, including participants and non-participants. This comprises a total of 52,111 observations, including 4,576 firms, from 59 countries and 77 industries.

### 8.2.2 Measuring performance

Authors have found varied solutions to measure the impact of voluntary CSR initiatives in participants' performance. Measures varied in that they focused on change or in absolute performance, whether they were a binary variable or not, whether they were survey based or built from publicly available information. Measures of absolute performance were more common in the literature than measures of change (Arimura et al., 2011, Bernhagen and Mitchell, 2010, Chen and Bouvain, 2009, Christmann and Taylor, 2006, Delmas and Montes-Sancho, 2010). The absolute measures ranged from CO2 emissions per unit of electricity produced (Delmas and Montes-Sancho, 2010), to whether the firm assesses the environmental performance of suppliers (Arimura et al., 2011), or whether the firm had a human rights policy (Hamann et al., 2009), among others. Measures of change were less frequent and often relied on self-evaluation of improvement obtained through surveys (Darnall and Kim, 2012, Yin and Schmeidler, 2009).

More specifically in the case of the UNGC, quantitative studies focused on absolute measures of performance. These varied from a binary display of formal human rights policy (Bernhagen and Mitchell, 2010), to assessment of rigour of human rights reporting (Hamann et al., 2009), profile of reporting in UNGC and other issues (Chen and Bouvain, 2009), and self-reported level of UNGC implementation (learner, active or advanced) (Schembera, 2012). While these help build important knowledge about the UNGC, one can argue that the performance measures used to date either fail to

encompass all UNGC issues or do not allow for a more fine-grained understanding of the impact the initiative on firm behaviour on the different issue areas. The measure proposed here therefore aims at addressing this gap, with multi-issue measures of performance in the UNGC.

### 8.2.3 Dependent variables

The dependent variables were chosen to cover the four issue areas of the UNGC, and as much as possible all 10 principles. In addition, guided by Wood's (1991a) definition of CSP, variables were chosen to demonstrate whether firms had policies in place stating their principles in regards to an issue and processes in place to implement those principles. Outcomes other than the existence of policies were more challenging to have as a dependent variable, as often the number of observations was too low to be used. Where possible, however, extra outcome dependent variables were added.

The year 2002 is the initial year as this is the first year of data available in ASSET4. While it would have been ideal to have the year 2000 as the initial year, as this is the first year of existence of the UNGC, 2002 is still the very early days of the initiative. The year 2011 is the end date for the measurement of performance. This represents an important proportion of UNGC's years of existence – over two thirds, therefore presenting an interesting and rich period for analysis.

A summary of the dependent variables is provided on the table below.

Table 36: List of dependent variables

Dependent variable	UNGC	Explanation	Values
	issue /		
	Principle		
SOCSCORE	Social	"The social pillar measures a company's capacity to generate trust and	0-100
		loyalty with its workforce, customers and society, through its use of best	
		management practices. It is a reflection of the company's reputation and	
		the health of its license to operate, which are key factors in determining	
		its ability to generate long term shareholder value."	
ENVSCORE	Environ	"The environmental pillar measures a company's impact on living and	0-100
	ment	non-living natural systems, including the air, land and water, as well as	
		complete ecosystems. It reflects how well a company uses best	
		management practices to avoid environmental risks and capitalize on	
		environmental opportunities in order to generate long term shareholder	
		value."	
CGVSCORE	Governa	"The corporate governance pillar measures a company's systems and	0-100
	nce	processes, which ensure that its board members and executives act in	
		the best interests of its long term shareholders. It reflects a company's	
		capacity, through its use of best management practices, to direct and	
		control its rights and responsibilities through the creation of incentives,	

		as well as shocks and balances in order to separate large terms	
		as well as checks and balances in order to generate long term shareholder value."	
Human rights policies in house	P1	"Does the company have a general, all-purpose policy regarding human rights?"	0 or 1
Human rights	P1	"Does the company describe, claim to have or mention processes in	0 or 1
processes in house	' '	place to ensure the respect of human rights in general?"	0 01 1
Human rights policies	P2	"Does the company have a human rights policy applying to its supply	0 or 1
supply chain		chain?"	
Human rights	P2	"Does the company describe, claim to have or mention processes in	0 or 1
processes supply		place to apply human rights standards to its supply chain?"	
chain			
Freedom of	P3	"Does the company have a policy to ensure the freedom of association	0 or 1
association policy		of its employees?"	
Freedom of	P3	"Does the company describe, claim to have or mention the processes in	0 or 1
association processes		place to ensure the freedom of association of its employees?"	
Trade union	P3	"Percentage of employees represented by independent trade union	0-100
representation		organizations or covered by collective bargaining agreements."	
Forced labour policies	P4	"Does the company have a policy to avoid forced labour?"	0 or 1
Forced labour	P4	"Does the company describe, claim to have or mention processes in	0 or 1
processes		place to avoid the use of forced labour?"	
Child labour policies	P5	"Does the company have a policy to avoid child labour?"	0 or 1
Child labour	P5	"Does the company describe, claim to have or mention processes in	0 or 1
processes		place to avoid the use of child labour?"	
Diversity policies	P6	"Does the company have a diversity and equal opportunity policy?"	0 or 1
Diversity processes	P6	"Does the company describe the implementation of its diversity and	0 or 1
		opportunity policy?"	
Percentage of women managers	P6	"Percentage of women managers."	0-100
Emission reduction	P7/8	"Does the company have a policy for reducing environmental emissions	0 or 1
policy		or its impacts on biodiversity? "	
Resource reduction	P7/8	"Does the company have a policy for reducing the use of natural	0 or 1
policy		resources?"	
Environmental	P7/8	"Does the company describe, claim to have or mention processes in	0 or 1
management		place to maintain an environmental management system?"	
Environmental	P7/8	Total amount of environmental expenditures as provided by ASSET4,	Any
expenditures by pre-		divided by Profit before tax, as provided by Datastream.	
tax profit			
Product innovation	P9	"Does the company have an environmental product innovation policy	0 or 1
policy	-	(eco-design, life cycle assessment, dematerialization)?"	
Product innovation	P9	"Does the company describe the implementation of its environmental	0 or 1
processes	D40	product innovation policy?"	0 0 1
Anti-corruption policy	P10	"Does the company have a policy to avoid bribery and corruption at all its operations?"	0 or 1
Anti-corruption	P10	"Does the company describe, claim to have or mention processes in	0 or 1
processes	1 10	place to avoid bribery and corruption practices at all its operations?"	0 01 1
Total donations by	Support	Total amount of all donations by the company as provided by ASSET4,	Any
pre-tax profit	to UN	divided by Profit before tax, as provided by Datastream.	, <b>,</b>
	goals	, ,	
CO2 equivalents	P7/8	Total CO2 and CO2 equivalents emission in tonnes.	Any
emissions total		,	
Waste recycling ratio	P7/8	The waste recycling ratio as reported by the company.	0-100
Energy use total	P7/8	Total direct and indirect energy consumption in gigajoules.	Any
Lifeigy asc total	F1/0	Total direct and indirect energy consumption in gigajodies.	

			relative to one million hours worked.	
Board	gender	P6	Percentage of women on the board of directors.	0-100
diversity				

It is important to highlight that SOCSCORE, ENVSCORE and CGVSCORE are scores. For ASSET4 data that means that they are a number between 0 and 100 that indicates the firm's performance in comparison to the remaining ASSET4 universe for a particular issue.

### 8.2.4 Independent variables

UNGC participant in current year – This variable indicates whether a firm is an UNGC participant in the current year. This data was obtained from ASSET4. It takes a value of one if the firm was a participant in that year, and zero if otherwise.

EARLY – This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 in 2002 or 2003, and zero if otherwise.

MIDDLE - This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 between 2004 and 2007, and zero if otherwise.

LATE - This variable builds on ASSET4 data. It takes a value of one if the firm was first classified as a UNGC participant by ASSET4 in 2008 of afterwards, and zero if otherwise.

#### 8.2.5 Control variables

The choice of control variables builds not only on the literature, but also on the knowledge acquired in chapter six in regards to factors that drive performance. Chapter six showed that factors at firm, industry and country level influence firms' performance in the UNGC issue areas. Therefore, for chapter seven, a set of control variables was chosen to be relevant variables, with a balanced representation of all three levels (firm, industry and country). A decision was made to restrict the number of control variables as compared to the ones available in chapter six for statistical efficiency. However, in order to test for robustness models were run with an extended list of control variables. Results were consistent with the ones presented here. More details on the variables used follow.

*Firm size* was measured as the log of employees, calculated from the variable number of employees provided by Datastream.

Slack resources are represented by ROTA (return on total assets), obtained from Datastream.

A dummy for *extractive industry* was created in SPSS. It gathers firms classified under SIC codes 10 (metal mining), 12 (coal mining), 13 (oil and gas extraction) and 14 (mining and quarrying of non-metallic minerals, except fuels). Authors have found different solutions to represent high impact industries. Bansal and Bogner (2002) focused on mining, forestry and chemicals; Knudsen (2011) focused on oil and manufacturing; Perez-Bastres et al (2012b) developed their own pollution intensiveness ranking; and Bernhagen and Mitchel (2010) looked into oil and gas and materials (these including mining and forestry product companies). Recognising this variety and the lack of a one fully agreed definition of high impact / extractive industry, this study follows EITI (Extractive Industry Transparency Initiative)'s focus on oil, gas and mining companies as firms in the extractive industry (EITI, 2014).

Stringency of regulatory environment was operationalised following Berliner and Prakash (2010). Out of the three available measures provided by the Economic Freedom of the World dataset, the one representing *Business Regulations* was chosen. It refers to a combination of administrative requirements; bureaucracy costs, starting a business, extra payments/bribes/favouritism, licensing restrictions and cost of tax compliance. Countries that receive higher ratings here leave markets to define prices and do not display regulatory activities that cause delays to entry into business and increase costs of production (Gwartney et al., 2011).

The measure of *Regulatory Quality* was taken from the World Bank's Worldwide Governance Indicators (WGI). It reflects perceptions of the government's ability to define and implement policies that allow for the development of the private sector. Values range from approximately -2.5 (weak governance performance) to +2.5 (strong governance performance).

To measure *Previous performance* the dependent variable for each model was lagged by one year.

Peer pressure at country and industry levels reflects the average performance of firms in the total sample (i.e. participants and non-participants) for each of the dependent variables, i.e. for each model a different set of variables was created. It was calculated from ASSET4 data, using SPSS, and lagged by one year.

## 8.3 Methods for analysis

Given the different types of dependent variables, two different methods were used for the analysis. For the models that had a binary variable as a depend variable, binary logistic regression was used. For the models that had a continuous variable as the dependent variable, linear regression was used.

# 8.4 Results

Descriptive statistics and Pearson correlation coefficients were run for the variables of this study <sup>17</sup>. It was observed that the dependent variables are significantly correlated to several of the independent and control variables. Twenty-six out the 31 dependent variables are positive and significantly correlated with being a UNGC participant. Similarly, 26 dependent variables are positively and significantly correlated to being an early joiner, 24 are positively and significantly correlated to being a joiner in the middle period and 24 to being a late joiner. Amongst the control variables, it is interesting to highlight that the majority of the dependent variables (28) were positively and significantly correlated to firm size, 25 were negatively correlated to business regulation and 15 were positively and significantly correlated to slack resources. Different from expected, however, 20 were negatively and significantly correlated to belonging to the extractive industry (compared to only nine that were positively and significantly correlated to this variable).

While most correlation coefficients conform to the norms, correlation coefficients between business regulation and regulatory quality presented a concern for multicollinearity, as the coefficient is greater than 0.8 (Field, 2009). Given the potential for multicollinearity concerns, further tests were run to check the Variance Inflation Factors (VIF). Using linear regression in SPSS, the tables below were prepared:

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<sup>&</sup>lt;sup>17</sup> Given the large size of the correlation table it was not included in this study; however, this is available upon request.

Table 37: Variance inflation factors (VIF)

	Collinearity S	Statistics		Collinearity S	Statistics
	Tolerance	VIF		Tolerance	VIF
(Constant)			(Constant)		
LAGS(SOCSCORE,1)	0.713	1.402	LAGS(HumanRightsPolicyElementsHumanRightsNUMERIC,1)	0.809	1.235
LAGS(AVRGSOCSCOREINDUSTRY,1)	0.822	1.216	LAGS(AVRGHumanRightsPolicyElementsHumanRightsINDUSTRY,1)	0.86	1.163
LAGS(AVRGSOCSCORECOUNTRY,1)	0.83	1.204	LAGS(AVRGHumanRightsPolicyElementsHumanRightsCOUNTRY,1)	0.76	1.316
Firm size	0.717	1.395	Firm size	0.827	1.209
ROTA	0.988	1.013	ROTA	0.992	1.008
Extractive industry	0.88	1.137	Extractive industry	0.918	1.09
Business regulation	0.603	1.657	Business regulation	0.61	1.64
Regulatory quality	0.616	1.625	Regulatory quality	0.588	1.7
a Dependent Variable: SOCSCORE			a Dependent Variable: HumanRightsPolicyElementsHumanRights N	UMERIC	

Although there is not a clearly established threshold of when a value of VIF should become a concern, this study follows Field (2009) in that values above 10 signal potential problems of multicollinearity. These tests showed no more concerns for the variables business regulation and regulatory quality.

The results of the logistic and linear regressions are presented in tables 35 to 38, 43 to 44, and 48. There are 31 dependent variables (26 original ones plus five extra outcome variables), as listed and described in table 33.

#### Models 01 to 26: Base models

Table 38: Regression table for models one to 18

	M1	M2	M3	M4	M5	M6	M7	M8	M9
				Human	Human	Human	Human		
Models				Rights	Rights	Rights	Rights	Freedom	Freedom
Wodels	SOCSCORE	ENVSCORE	CGVSCORE	policies in	processes	policies	processes	association	association
				house	in house	supply	supply	policy	processes
				House	III IIOUSC	chain	chain		
	-18.614	-13.436	-17.568	-5.106	-4.531	-6.457	-4.93	-6.22	-5.183
Constant	(1.837)	(1.754)	(1.603)	(0.454)	(0.544)	(0.49)	(0.575)	(0.505)	(0.684)
	***	***	***	`***	***	***	***	`***	***
	1.346	1.203	0.97	0.313	0.425	0.447	0.464	0.358	0.371
Firm Size	(0.078)	(0.076)	(0.065)	(0.021)	(0.028)	(0.024)	(0.029)	(0.024)	(0.034)
IIII OIZE	(0.070)	(0.070)	(0.003)	(0.021)	(0.020)	(0.02-1)	(0.023)	***	(0.054)
						0.009	0.015	0.006	0.013
DOTA	0.014	0.015	-0.006	0.002	0.005				
ROTA	(0.011)	(0.012)	(0.01)	(0.003)	(0.005)	(0.003)	(0.004)	(0.004)	(0.005)
				, ,					
	2.393	1.076	2.215	0.785	0.943	0.3	0.368	0.902	0.501
Extractive Industry	(0.488)	(0.492)	(0.466)	(0.128)	(0.152)	(0.15)	(0.183)	(0.143)	(0.203)
	***	**	***	***	***	**	**	***	**
	1.109	0.024	1.712	-0.281	-0.631	-0.322	-0.802	-0.314	-0.519
Business regulation	(0.239)	(0.237)	(0.215)	(0.067)	(0.083)	(0.073)	(0.09)	(0.076)	(0.104)
	***	(0.237)	***	***	***	***	***	***	***
	-1.062	1.14	0.164	0.466	0.686	0.702	1.429	0.803	0.693
Regulatory quality	(0.416)	(0.423)	0.164	(0.118)	(0.146)	(0.129)	(0.168)	(0.136)	(0.182)
3 7 4 3	**	***	(0.427)	***	***	***	***	***	***
	0.811	0.828	0.661	4.722	4.837	4.921	4.853	4.727	4.917
LAG Dependent Variable	(0.005)	(0.005)	(0.006)	(0.077)	(0.104)	(0.095)	(0.116)	(0.082)	(0.123)
210 Dependent variable	***	***	***	***	***	***	***	***	***
	0.112	0.125		1.11	3.114	1.414	3.743	1.325	
AC			0.017						0.392
LAG peer performance in industry	(0.012)	(0.009)	(0.014)	(0.243)	(0.5)	(0.252)	(0.44)	(0.34)	(0.995)
	0.132	0.109	0.306	2.971	2.982	3.135	3.307	3.586	4.154
LAG Peer performance in country	(0.011)	(0.01)	(0.008)	(0.192)	(0.468)	(0.243)	(0.467)	(0.236)	(0.625)
	***	***	***	***	***	***	***	***	***
N	15921	15921	15921	15287	15287	15287	15287	15287	15287
R Square	0.78	0.797	0.81						
Adjusted R Square	0.78	0.797	0.81						
Nagelkerke R Square				0.744	0.63	0.719	0.629	0.722	0.571
Percentage correct cases				81.8	69.6	76.4	67.5	80	67.4
	M10	M11	M12	M13	M14	M15	M16	M17	M18
			Forced					Percentage	Emission
Models	Trade union	Forced labour	labour	Child labour	Child labour	Diversity	Diversity	of women	reduction
	representation	policies	processes	policies	processes	policies	processes	managers	policy
	-	-6.366	-5.996	-6.682	-6.253	-3.685	-1.494	2.549	-4.539
Constant	-2.393	(0.499)	(0.869)	(0.501)	(0.728)	(0.471)	(0.362)	(1.439)	(0.465)
Jonstant	(2.06)	(0.455)		(0.501)		(0.471)			
			***				***	(1.455)	
			***	***	***		***	(1.455)	***
	0.176	0.452	0.372	0.466	0.393	0.235	0.238	* *	0.291
Firm Size	(0.093)	0.452 (0.024)	0.372 (0.045)	0.466 (0.024)	0.393 (0.036)	0.235 (0.021)	0.238 (0.016)	-0.107	0.291 (0.021)
Firm Size		0.452 (0.024) ***	0.372 (0.045) ***	0.466 (0.024)	0.393 (0.036) ***	0.235	0.238 (0.016) ***	-0.107 (0.069)	0.291 (0.021) ***
	(0.093)	0.452 (0.024) *** 0.009	0.372 (0.045) *** 0.013	0.466 (0.024) ***	0.393 (0.036) *** 0.021	0.235 (0.021) ***	0.238 (0.016) *** 0.005	-0.107 (0.069)	0.291 (0.021) *** 0.007
Firm Size	(0.093) * -0.011	0.452 (0.024) *** 0.009 (0.004)	0.372 (0.045) *** 0.013 (0.005)	0.466 (0.024) *** 0.011 (0.004)	0.393 (0.036) *** 0.021 (0.005)	0.235 (0.021) *** 0.003	0.238 (0.016) *** 0.005 (0.003)	-0.107 (0.069) 0.028 (0.016)	0.291 (0.021) *** 0.007 (0.003)
	(0.093)	0.452 (0.024) *** 0.009	0.372 (0.045) *** 0.013	0.466 (0.024) ***	0.393 (0.036) *** 0.021	0.235 (0.021) ***	0.238 (0.016) *** 0.005	-0.107 (0.069)	0.291 (0.021) *** 0.007
	(0.093) * -0.011 (0.012)	0.452 (0.024) *** 0.009 (0.004)	0.372 (0.045) *** 0.013 (0.005) **	0.466 (0.024) *** 0.011 (0.004)	0.393 (0.036) *** 0.021 (0.005) ***	0.235 (0.021) *** 0.003 (0.003)	0.238 (0.016) *** 0.005 (0.003)	-0.107 (0.069) 0.028 (0.016)	0.291 (0.021) *** 0.007 (0.003)
ROTA	(0.093) * -0.011 (0.012) 0.035	0.452 (0.024) *** 0.009 (0.004) **	0.372 (0.045) *** 0.013 (0.005) **	0.466 (0.024) *** 0.011 (0.004) ***	0.393 (0.036) *** 0.021 (0.005) ***	0.235 (0.021) *** 0.003 (0.003) 0.131	0.238 (0.016) *** 0.005 (0.003) *	-0.107 (0.069) 0.028 (0.016) *	0.291 (0.021) *** 0.007 (0.003) ** 0.523
	(0.093) * -0.011 (0.012)	0.452 (0.024) *** 0.009 (0.004)	0.372 (0.045) *** 0.013 (0.005) **	0.466 (0.024) *** 0.011 (0.004) ***	0.393 (0.036) *** 0.021 (0.005) ***	0.235 (0.021) *** 0.003 (0.003)	0.238 (0.016) *** 0.005 (0.003)	-0.107 (0.069) 0.028 (0.016)	0.291 (0.021) *** 0.007 (0.003) **
ROTA	(0.093) * -0.011 (0.012) 0.035 (0.471)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) ***	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277)	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) **	-0.107 (0.069) 0.028 (0.016) -0.596 (0.504)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) ***
ROTA  Extractive Industry	(0.093) * -0.011 (0.012) 0.035	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) ***	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277) -0.506	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) **	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) ***
ROTA	(0.093) * -0.011 (0.012) 0.035 (0.471)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074)	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277) -0.506 (0.134)	0.466 (0.024) **** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074)	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055)	-0.107 (0.069) 0.028 (0.016) -0.596 (0.504)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067)
ROTA  Extractive Industry	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ***	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277) -0.506 (0.134) ***	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) ***	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) ***	0.238 (0.016) **** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) ***	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) ***
Extractive Industry Business regulation	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ***	0.372 (0.045) **** 0.013 (0.005) ** 0.289 (0.277) -0.506 (0.134) ***	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) ***	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) ***	0.238 (0.016) **** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) ***	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218)	0.291 (0.021) **** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) ***
ROTA  Extractive Industry	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538	0.452 (0.024)  0.009 (0.004)  0.701 (0.143)  -0.365 (0.074)  0.653 (0.13)	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127)	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) *	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122)
Extractive Industry Business regulation	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ***	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277) -0.506 (0.134) *** 0.841 (0.245)	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127)	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) ***	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101) ***	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122) ***
Extractive Industry Business regulation	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538	0.452 (0.024)  0.009 (0.004)  0.701 (0.143)  -0.365 (0.074)  0.653 (0.13)	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127)	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) *	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122)
Extractive Industry Business regulation	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ***	0.372 (0.045) *** 0.013 (0.005) ** 0.289 (0.277) -0.506 (0.134) *** 0.841 (0.245)	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127)	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206)	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101) ***	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122) ***
Extractive Industry Business regulation Regulatory quality	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ** 0.653 (0.13) ** 5.147	0.372 (0.045) 	0.466 (0.024) **** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206) 4.944	0.235 (0.021) *** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) ***	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101) ***	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122) ***
Extractive Industry Business regulation Regulatory quality	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538 (0.579)  0.942 (0.008)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) *** 0.653 (0.13) *** 5.147 (0.099)	0.372 (0.045) 	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206) *** 4.944 (0.138)	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101) *** 3.699 (0.064) ***	-0.107 (0.069) 0.028 (0.016) -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** 0.766 (0.122) *** 5.173 (0.091)
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ** 0.653 (0.13) ** 5.147 (0.099) ** 2.517	0.372 (0.045) 	0.466 (0.024) **** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) *** 2.403	0.393 (0.036) (0.005) 	0.235 (0.021) **** 0.003 (0.003) (0.131 (0.133) *** 0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) ***	0.238 (0.016) 	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.0106)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122) *** 5.173 (0.091) ***
Extractive Industry Business regulation Regulatory quality	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538 (0.579)  0.942 (0.008)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) *** 0.653 (0.13) *** 5.147 (0.099)	0.372 (0.045) 	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) ***	0.393 (0.036) *** 0.021 (0.005) *** 0.363 (0.224) -0.533 (0.112) *** 1.15 (0.206) *** 4.944 (0.138)	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079)	0.238 (0.016) *** 0.005 (0.003) * 0.216 (0.109) ** -0.699 (0.055) *** 1.282 (0.101) *** 3.699 (0.064) ***	-0.107 (0.069) 0.028 (0.016) -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012)	0.291 (0.021) *** 0.007 (0.003) ** 0.523 (0.132) *** 0.766 (0.122) *** 5.173 (0.091)
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538 (0.579)  0.942 (0.008)  ***  0.034 (0.009)  ***	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) *** -0.365 (0.074) ** 0.653 (0.13) ** 5.147 (0.099) ** 2.517 (0.265) (0.274) **	0.372 (0.045) 	0.466 (0.024) *** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) *** 2.403 (0.245) ***	0.393 (0.036) (0.005) 	0.235 (0.021)	0.238 (0.016) 	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) ***	0.291 (0.021) **** 0.007 (0.003) *** 0.523 (0.132) *** -0.353 (0.067) *** 0.766 (0.122) *** 5.173 (0.091) ***
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034 (0.009) 0.034 (0.009) 0.045	0.452 (0.024) 	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)  5.275 (0.17)  5.796 (1.023) 	0.466 (0.024) **** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) *** 2.403 (0.245) ***	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** -0.121 (0.211)	0.238 (0.016) 	-0.107 (0.069) 0.028 (0.016) *-0.596 (0.504) -0.372 (0.218) ** 0.459 (0.442) 0.875 (0.012) *** 0.106 (0.016)	0.291 (0.021) **** 0.007 (0.003) *** 0.523 (0.132) *** -0.353 (0.067) *** 5.173 (0.091) *** 1.528 (0.162) ***
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	(0.093)	0.452 (0.024)************************************	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)  5.275 (0.17)  5.796 (1.023)  5.227 (1.718)	0.466 (0.024)	0.393 (0.036)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138)  5.8 (0.632)  4.133 (0.846)	0.235 (0.021)	0.238 (0.016) *** 0.005 (0.003) ** 0.216 (0.109) ** 1.282 (0.101) *** 3.699 (0.064) *** 0.714 (0.17) *** 2.024 (0.168)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) *** 0.016 (0.016) ***	0.291 (0.021) **** 0.007 (0.003) *** 0.523 (0.132) *** 0.766 (0.122) *** 1.528 (0.162) *** 1.528 (0.162) ***
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034 (0.009) 0.034 (0.009) 0.045	0.452 (0.024) 	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)  5.275 (0.17)  5.796 (1.023) 	0.466 (0.024) **** 0.011 (0.004) *** 0.748 (0.143) *** -0.34 (0.074) *** 0.617 (0.127) *** 5.068 (0.095) *** 2.403 (0.245) ***	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** -0.121 (0.211)	0.238 (0.016) 	-0.107 (0.069) 0.028 (0.016) *-0.596 (0.504) -0.372 (0.218) ** 0.459 (0.442) 0.875 (0.012) *** 0.106 (0.016)	0.291 (0.021) **** 0.007 (0.003) *** 0.523 (0.132) *** -0.353 (0.067) *** 5.173 (0.091) *** 1.528 (0.162) ***
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034 (0.009) 0.045 (0.009)	0.452 (0.024) 	0.372 (0.045) 	0.466 (0.024)	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133 (0.846)	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** 10.211 (0.211) 2.437 (0.183) ***	0.238 (0.016)  0.005 (0.003)  0.216 (0.109)  -0.699 (0.055)  1.282 (0.101)  3.699 (0.064)  0.714 (0.17)  2.024 (0.168)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) * 0.06 (0.016) **	0.291 (0.021)
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034 (0.009) 0.045 (0.009)	0.452 (0.024)************************************	0.372 (0.045)  0.013 (0.005)  0.289 (0.277) -0.506 (0.134)  0.841 (0.245)  5.275 (0.17)  5.796 (1.023)  5.227 (1.718)	0.466 (0.024)	0.393 (0.036)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138)  5.8 (0.632)  4.133 (0.846)	0.235 (0.021) **** 0.003 (0.003) *** 0.131 (0.133) **-0.289 (0.068) *** 4.409 (0.079) **** -0.121 (0.211) *** 2.437 (0.183)	0.238 (0.016) *** 0.005 (0.003) ** 0.216 (0.109) ** 1.282 (0.101) *** 3.699 (0.064) *** 0.714 (0.17) *** 2.024 (0.168)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) *** 0.06 (0.016) ***	0.291 (0.021) **** 0.007 (0.003) *** 0.523 (0.132) *** 0.766 (0.122) *** 1.528 (0.162) *** 1.528 (0.162) ***
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  N R Square	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538 (0.579)  0.942 (0.008)   0.034 (0.009)   0.045 (0.009)   2850 0.953	0.452 (0.024) 	0.372 (0.045) 	0.466 (0.024)	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133 (0.846)	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** 10.211 (0.211) 2.437 (0.183) ***	0.238 (0.016)  0.005 (0.003)  0.216 (0.109)  -0.699 (0.055)  1.282 (0.101)  3.699 (0.064)  0.714 (0.17)  2.024 (0.168)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) *** 0.106 (0.016) *** 0.06 (0.019) ***	0.291 (0.021)
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  N  R  R Square  Adjusted R Square	(0.093) -0.011 (0.012) 0.035 (0.471) 0.141 (0.312) -0.538 (0.579) 0.942 (0.008) 0.034 (0.009) 0.045 (0.009)	0.452 (0.024) *** 0.009 (0.004) ** 0.701 (0.143) ** -0.365 (0.074) ** 5.147 (0.099) ** 2.517 (0.266) (0.27) ***	0.372 (0.045) 	0.466 (0.024)	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133 (0.846) 	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** -0.121 (0.211) 2.437 (0.183) ***	0.238 (0.016) 	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) *** 0.06 (0.016) ***	0.291 (0.021)
Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  N R Square	(0.093)  -0.011 (0.012)  0.035 (0.471)  0.141 (0.312)  -0.538 (0.579)  0.942 (0.008)   0.034 (0.009)   0.045 (0.009)   2850 0.953	0.452 (0.024) 	0.372 (0.045) 	0.466 (0.024)	0.393 (0.036) (0.005)  0.021 (0.005)  0.363 (0.224) -0.533 (0.112)  1.15 (0.206)  4.944 (0.138) (0.632)  4.133 (0.846)	0.235 (0.021) **** 0.003 (0.003) 0.131 (0.133) -0.289 (0.068) *** 0.87 (0.127) *** 4.409 (0.079) *** 10.211 (0.211) 2.437 (0.183) ***	0.238 (0.016)  0.005 (0.003)  0.216 (0.109)  -0.699 (0.055)  1.282 (0.101)  3.699 (0.064)  0.714 (0.17)  2.024 (0.168)	-0.107 (0.069) 0.028 (0.016) * -0.596 (0.504) -0.372 (0.218) * 0.459 (0.442) 0.875 (0.012) *** 0.106 (0.016) *** 0.06 (0.019) ***	0.291 (0.021)

Models 1 to 26 include only the control variables, accounting for the impact of firm size, slack resources, previous performance, belonging to the extractive industry, the regulatory environment and peer pressure at country and industry on the different performance variables. It is important to highlight that, despite being parsimonious in number of variables, these models display, in most cases, high R squares and Nagelkerke R squares. This can be largely attributed to the use of the lag of the

dependent variable as one of the independent variables. One could argue that what the firm did the year before, from a performance perspective, will have an important impact in what the firm will do in the current year. This may be especially true for the dummy variables – for example, if a firm had a human rights policy in the previous year, it is highly likely that it will still have it in the current year. In addition, the literature suggests that firms are relatively slow in changing their corporate social performance – i.e. one should expect relatively moderate variation from one year to the other. Therefore, in those cases and for those reasons, the strong explanatory power was not surprising.

Model 01 ( $R^2$ =0.78) has SCOSCORE as the dependent variable. The three strongest predictors for this social performance variable are belonging to the extractive industry (Beta=2.393, p<0.01), firm size (Beta=1.346, p<0.01) and less stringent business regulation (Beta=1.109, p<0.01). Model 02 ( $R^2$ =0.797) focuses on an overarching environmental performance variable (ENVSCORE). This is mainly predicted by firm size (Beta=1.203, p<0.01), followed by good regulatory quality at national level (Beta=1.14, p<0.01) and belonging to the extractive industry (Beta=1.076, p<0.05). Finally, model 03 ( $R^2$ =0.81) focuses on an overarching measure of corporate governance (CVGSCORE). The top three predictors here are belonging to the extractive industry (Beta=2.215, p<0.01), a less stringent business regulation (Beta=1.71, p<0.01) and firm size (Beta=0.97, p<0.01).

Model 04 and 05 focus on the existence of a human rights policy and its implementation; they explain 74.4% and 63% of the variation (Nagelkerke  $R^2$ ) and correctly classify 81.8% and 69.6% of cases, respectively. The odds of having such policy are mainly influenced by previous performance (Exp(B)=112, p<0.01), higher performance amongst peers in the country (Exp(B)=19.5, p<0.01), and higher performance amongst industry peers (EXP(B)=3.03, p<0.01). These are also the top three predictors for model 05, although peer pressure at industry level is stronger than at country level. Models 06 (Nagelkerke  $R^2$ =0.719) and 07 (Nagelkerke  $R^2$ =0.629) correctly classify 76.4% and 67.5% of the cases. These models focus on the existence of human rights policies for the supply chain and the implementation of these; the top three predictors for these models are the same as for the previous two models.

Models 08 to 10 focus on freedom of association: dependent variables are existence of policy, implementation and percentage of unionized employees respectively. Models 08 and 09 (Nagelkerke R<sup>2</sup>=0.722 and 0.571 respectively), correctly classify

80% and 67.4% of cases. Model 09 explains 95.3% of variation in unionisation (R<sup>2</sup>). Previous performance and peer pressure at country level are the two main predictors in all cases. This is followed by industry peer pressure for models 08 and 10, and good regulatory quality for model 09.

Models 11 and 12 focus on forced labour policies and implementation respectively. Explaining 73.6% and 52.4% of the variation (Nagelkerke R²), they correctly classify 77.7% and 61.2% of cases. Previous performance and peer pressure at industry and country level are the most important factors in increasing the odds of having such policy and implementing it. Models 13 and 14 (Nagelkerke R²=0.753 and 0.57), on the other hand, focus on policies on child labour and the implementation of these, correctly classifying 79.2% and 64.4% of cases respectively. The top three predictors remain the same as in the previous two models.

Existence of diversity policies, implementation of these and the ratio of female managers are the dependent variables for models 15, 16 and 17. These models explain 70.3%, 66.6% (Nagelkerke R²) and 88.1% (R²) of the variation in the dependent variables respectively, and the first two correctly classify 91.2% and 83.6% of cases. The odds of presence of a diversity policy and its implementation are mainly influenced by previous performance, followed by peer performance at country level and good regulatory quality. The predictors for the ratio of female managers are previous performance, followed by peer performance at industry and country levels.

Table 39: Regression table for base models 19 to 26

	M19	M20	M21	M22	M23	M24	M25	M26
Models	Resource reduction policy	Environmental management	Environmental expenditures by pre-tax profit	Product innovation policy	Product innovation processes	Anti- corruption policy	Anti- corruption processes	Total donations by pre-tax profit
Constant	-5.163 (0.546) ***	-1.162 (0.411) ***	601.273 (749.605)	-4.296 (0.439) ***	-0.73 (0.323) ***	-4.027 (0.421) ***	-1.784 (0.394) ***	41.404 (69.087)
Firm Size	0.264 (0.023) ***	0.251 (0.019) ***	-35.654 (41.691)	0.234 (0.02) ***	0.28 (0.016) ***	0.26 (0.019) ***	0.228 (0.018) ***	2.782 (3.1)
ROTA	0.008 (0.004) **	0.007 (0.003) **	-1.471 (8.856)	0.003 (0.003)	0.01 (0.003) ***	0 (0.003)	0.009 (0.003) ***	0.591 (0.63)
Extractive Industry	0.319 (0.139) **	0.679 (0.117) ***	-299.306 (216.425)	0.006 (0.154)	-0.367 (0.126) ***	0.673 (0.128) ***	0.539 (0.115) ***	21.504 (22.193)
Business regulation	-0.28 (0.077) ***	-0.875 (0.065) ***	33.992 (117.466)	-0.352 (0.067) ***	-0.927 (0.051) ***	-0.264 (0.061) ***	-0.674 (0.062) ***	-14.516 (10.665)
Regulatory quality	0.856 (0.144) ***	1.105 (0.118) ***	-206.703 (229.859)	0.732 (0.126) ***	1.377 (0.094) ***	0.823 (0.114) ***	1.193 (0.113) ***	11.955 (16.881)
LAG Dependent Variable	5.421 (0.103) ***	4.373 (0.076) ***	0.804 (0.009) ***	4.9 (0.08) ***	2.235 (0.053) ***	4.719 (0.085) ***	4.451 (0.085) ***	0.412 (0.065) ***
LAG peer performance in industry	1.241 (0.192) ***	2.605 (0.188) ***	-0.167 (0.036) ***	2.409 (0.155) ***	1.595 (0.148) ***	-0.64 (0.174) ***	-0.362 (0.189) *	-0.079 (0.077)
LAG Peer performance in country	2.306 (0.2) ***	1.356 (0.213) ***	-0.286 (0.088) ***	1.72 (0.203) ***	0.701 (0.158) ***	2.773 (0.143) ***	3.011 (0.154) ***	1.02 (0.261) ***
N R Square	15287	15287	2002 0.805	15287	15287	15287	15287	4532 0.016
Adjusted R Square			0.804					0.015
Nagelkerke R Square	0.799	0.681		0.774	0.408	0.758	0.716	
Percentage correct cases	91.6	75.6		84.4	57.2	86.3	77	l

Models 18 to 21 have the presence of a resource reduction policy, of an emission reduction policy, the implementation of environment management and environment expenditures as a percentage of pre tax profit as the dependent variables. Model 18 (Nagelkerke  $R^2$ =0.784), 19 (Nagelkerke  $R^2$ =0.799) and 20 (Nagelkerke  $R^2$ =0.681) correctly classify 87.2%, 91.6% and 75.6% of cases. Previous performance increases the odds of better performance in models 18, 19 and 20 by 176.515 times, 226.208 times and 79.304 times respectively (Exp(B)). Good peer performance at industry and country levels follow as top predictors. Model 21 explains 80.5% of variance. Environmental expenditures per pre tax profit are largely explained by previous performance and, surprisingly, poorer performance amongst peers at industry and country levels.

Having a green innovation policy and implementing it are the focus of models 22 and 23. While model 22 explains 77.4% of variation, model 23 explains only 40.8% (Nagelkerke R²); they both correctly classify over 50% of cases (84.4% and 57.2% respectively). The odds of having a policy are mainly influenced by previous performance, followed by peer performance at industry and country levels. The odds of implementing it are mainly increased by previous good performance, previous good industry peer performance and good regulatory quality.

Models 24 and 25 focus on anti-corruption efforts – existence of a policy and implementation respectively. Model 24 (Nagelkerke  $R^2$ =0.758) correctly classifies 86.3% of cases, while model 25 (Nagelkerke  $R^2$ =0.716) correctly classifies 77% of cases. Previous good performance, followed by peer performance at industry level and good regulatory quality are the top three factors increasing the odds of firms having an anti-corruption policy and implementing it. Finally, model 26 focuses on donations as a ratio of pre tax profit and explains only 1.6% of variation ( $R^2$ ). The main drivers for higher levels of donation are peer performance at country level (Beta=1.02, p<0.01) and previous performance (Beta=0.412, p<0.01).

#### Models 27 to 52: Does joining the UNGC make a difference to performance?

Models 27 to 52 introduce the independent variable "UNGC participant in current year" that shows whether a firm is an UNGC participant. With that, one can understand whether being a participant makes a difference in firms' performance in the ten principles. In general, models 27 to 52 offer little improvement in explanatory power when compared to models 1 to 26. Nevertheless, they are fundamental to understand the role of joining the UNGC in firms' performance.

Table 40: Regression table for models 27 to 44

	M27	M28	M29	M30	M31	M32	M33	M34	M35
Models	SOCSCORE	ENVSCORE	CGVSCORE	Human Rights	Human Rights	Human Rights policies	Human Rights processes	Freedom association	Freedom
				policies in house	processes in house	supply chain	supply chain	policy	processes
Constant	-16.242 (1.843) ***	-12.227 (1.756) ***	-17.897 (1.591) ***	-4.659 (0.462) ***	-4.303 (0.546) ***	-5.879 (0.492) ***	-4.526 (0.577) ***	-5.79 (0.512) ***	-4.493 (0.689) ***
Firm Size	1.224 (0.079) ***	1.08 (0.077) ***	0.733 (0.066) ***	0.24 (0.022) ***	0.341 (0.029) ***	0.356 (0.025) ***	0.378 (0.03) ***	0.303 (0.025) ***	0.281 (0.036) ***
ROTA	0.018 (0.011)	0.015 (0.012)	-0.005 (0.01)	0.002 (0.003)	0.005 (0.005)	0.01 (0.003) ***	0.016 (0.004) ***	0.007 (0.004) **	0.014 (0.005) ***
Extractive Industry	1.857 (0.488) ***	0.656 (0.494)	1.641 (0.464) ***	0.732 (0.131) ***	0.824 (0.157) ***	0.174 (0.155)	0.162 (0.191)	0.877 (0.148) ***	0.353 (0.204) *
Business regulation	1.074 (0.238)	0.101 (0.237)	1.926 (0.214) ***	-0.27 (0.068) ***	-0.549 (0.083) ***	-0.338 (0.074) ***	-0.795 (0.091) ***	-0.322 (0.077) ***	-0.503 (0.104) ***
Regulatory quality	-0.683 (0.416)	1.204 (0.422) ***	0.154 (0.424)	0.529 (0.122) ***	0.616 (0.149) ***	0.873 (0.135) ***	1.558 (0.174) ***	0.905 (0.139) ***	0.64 (0.183) ***
LAG Dependent Variable	0.798 (0.005) ***	0.82 (0.005) ***	0.643 (0.006) ***	4.624 (0.078) ***	4.765 (0.106) ***	4.838 (0.096) ***	4.757 (0.117)	4.675 (0.084)	4.821 (0.126) ***
LAG peer performance in industry	0.109 (0.012) ***	0.129 (0.009) ***	0.016 (0.014)	1.242 (0.249) ***	3.185 (0.509) ***	1.923 (0.261)	4.427 (0.455) ***	1.187 (0.347)	0.364 (1.024)
LAG Peer performance in country	0.104 (0.011) ***	0.091 (0.011) ***	0.331 (0.008) ***	2.555 (0.2) ***	2.047 (0.481) ***	2.399 (0.256) ***	2.17 (0.483) ***	2.916 (0.25) ***	2.301 (0.661) ***
UNGC participant in current year	4.007 (0.368) ***	3.053 (0.365) ***	4.852 (0.312) ***	1.229 (0.093) ***	0.964 (0.093) ***	1.217 (0.088) ***	1.032 (0.098) ***	0.912 (0.095) ***	1.037 (0.117) ***
N	15921	15921	15921	15024	15024	15024	15024	15024	15024
R Square	0.781	0.798	0.813	10024	10024	10024	10024	10024	10024
Adjusted R Square	0.781	0.798	0.813						
Nagelkerke R Square	+			0.751	0.637	0.729	0.641	0.728	0.581
Percentage correct cases	M36	M37	M38	82	69.5	76.9	67.7	80.1	67.4
	M36 Trade union representation	M37 Forced labour policies	M38 Forced labour processes					80.1 M43 Percentage of women	
Percentage correct cases	Trade union	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877)	82 M39 Child labour	69.5 M40 Child labour	76.9 M41 Diversity	67.7 M42 Diversity processes -1.314 (0.365)	80.1 M43 Percentage	67.4 M44 Emission reduction policy -4.326 (0.466)
Percentage correct cases  Models	Trade union representation	Forced labour policies	Forced labour processes -5.835 (0.877)	M39 Child labour policies -6.307	69.5 M40 Child labour processes -6.004	76.9 M41 Diversity policies -3.534	67.7 M42 Diversity processes -1.314	80.1 M43 Percentage of women managers 2.834	67.4 M44 Emission reduction policy -4.326
Percentage correct cases  Models  Constant	Trade union representation  -2.161 (2.1)  0.152	Forced labour policies  -5.924 (0.502) *** 0.376	Forced labour processes  -5.835 (0.877) *** 0.294	82 M39 Child labour policies -6.307 (0.505) ***	69.5 M40 Child labour processes -6.004 (0.739) ***	76.9 M41 Diversity policies -3.534 (0.477)	67.7 M42 Diversity processes -1.314 (0.365) ***	80.1 M43 Percentage of women managers 2.834 (1.445) *	67.4 M44 Emission reduction policy -4.326 (0.466)
Percentage correct cases  Models  Constant  Firm Size	Trade union representation -2.161 (2.1) 0.152 (0.097) -0.011	Forced labour policies  -5.924 (0.502)  ***  0.376 (0.025)  ***  0.01 (0.004)	Forced labour processes  -5.835 (0.877) ***  0.294 (0.047) ***  0.013 (0.005)	82 M39 Child labour policies -6.307 (0.505) **** 0.393 (0.025) **** 0.013 (0.004)	69.5 M40 Child labour processes -6.004 (0.739) *** 0.318 (0.038) *** 0.022 (0.005)	76.9 M41 Diversity policies -3.534 (0.477) **** 0.204 (0.021) ****	67.7 M42 Diversity processes -1.314 (0.365) *** 0.205 (0.017) ***	80.1 M43 Percentage of women managers 2.834 (1.445) * -0.136 (0.073) *	67.4 M44 Emission reduction policy -4.326 (0.466) **** 0.256 (0.021) **** 0.007 (0.003)
Percentage correct cases  Models  Constant  Firm Size  ROTA	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148	Forced labour policies  -5.924 (0.502) -5.925 (0.002) -5.924 (0.002) -5.924 (0.002) -7.924 (0.004) -7.924 (0.00	Forced labour processes  -5.835 (0.877) **** 0.294 (0.047) *** 0.013 (0.005) ** 0.074	82 M39 Child labour policies -6.307 (0.505) *** 0.393 (0.025) *** 0.013 (0.004) ***	69.5 M40 Child labour processes -6.004 (0.739) *** 0.318 (0.038) *** 0.022 (0.005) ***	76.9 M41 Diversity policies -3.534 (0.477) *** 0.204 (0.021) *** 0.003 (0.003)	67.7 M42 Diversity processes -1.314 (0.365) *** 0.205 (0.017) *** 0.005 (0.003) 0.156	80.1 M43 Percentage of women managers 2.834 (1.445) * -0.136 (0.073) * 0.023 (0.017)	67.4 M44 Emission reduction policy -4.326 (0.466) 0.256 (0.021) 0.007 (0.003) 0.513 (0.133)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877)	82 M39 Child labour policies -6.307 (0.505) *** 0.393 (0.025) *** 0.013 (0.04) *** 0.678 (0.147) *** -0.314 (0.074)	69.5 M40 Child labour processes -6.004 (0.739)  0.318 (0.038)  0.022 (0.005)  0.201 (0.228)	76.9 M41 Diversity policies -3.534 (0.477) **** 0.204 (0.021) *** 0.003 (0.003) -0.094 (0.134) -0.288 (0.069)	67.7 M42 Diversity processes -1.314 (0.365) *** 0.205 (0.017) ** 0.005 (0.003) ** 0.005 (0.017) -0.701 (0.056)	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) 0.023 (0.017) -0.662 (0.512)	67.4 M44 Emission reduction policy -4.326 (0.466) 0.256 (0.021) 0.007 (0.003) 0.513 (0.133)0.344 (0.068)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707	Forced labour policies  -5.924 (0.502) 0.376 (0.025) 0.01 (0.004) 0.615 (0.147)0.342 (0.074) 0.693 (0.134)	Forced labour processes  -5.835 (0.877)  0.294 (0.047)  0.013 (0.005)  0.074 (0.29) -0.443 (0.135)  0.831	82 M39 Child labour policies -6.307 (0.505) *** 0.393 (0.025) 0.013 (0.004) *** 0.678 (0.147) *** 0.314 (0.074)	69.5 M40 Child labour processes -6.004 (0.739) *** 0.318 (0.038) 0.022 (0.005) *** 0.221 (0.228) 0.114)	76.9 M41 Diversity policies -3.534 (0.477) 0.204 (0.021) 0.003 (0.003) 0.094 (0.134) 0.288 (0.069) 0.93	67.7 M42 Diversity processes -1.314 (0.365) *** 0.205 (0.007) (0.003) * 0.156 (0.11) -0.701 (0.056) ***	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) 0.023 (0.017) -0.662 (0.512) -0.362 (0.219)	67.4  Market Parket Par
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29) 0.443 (0.135) 0.831 (0.251) 5.214	82 M39 M39 M39 M39 M39 M39 M39 M39	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.208) -0.489 (0.114) 1.158 (0.21) -4.895	76.9 M41 Diversity policies -3.534 (0.477) 0.204 (0.021) 0.003 (0.003) 0.094 (0.134) -0.288 (0.069) 4.33 (0.08)	67.7 M42 Diversity processes -1.314 (0.365) 0.205 (0.017) 0.005 (0.003) 0.156 (0.11) -0.701 (0.056) 1.336 (0.103) 3.665	80.1 M43 Percentage of women managers 2.834 (1.445) 0.136 (0.073) 0.023 (0.017) - 0.662 (0.512) - 0.362 (0.219) - 0.445 (0.445) - 0.879	67.4 M44 Emission reduction policy -4.326 (0.466) 0.256 (0.021) 0.003 0.513 (0.133)0.344 (0.068) 0.802 (0.125) 5.091 (0.091)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)	Forced labour policies  -5.924 (0.502)  0.376 (0.025)  0.01 (0.004)  0.615 (0.147)  -0.342 (0.074)  0.693 (0.134)  5.077 (0.1)  2.862 (0.273)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29) 0.043 (0.135) 0.831 (0.251) 5.214 (0.172) 6.281 (1.038)	82 M39 Child labour policies -6.307 (0.505)  0.333 (0.004)  0.678 (0.147)  0.652 (0.132)  0.652 (0.132)  0.652 (0.102)	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.228) -0.489 (0.114) 1.158 (0.21) 4.895 (0.14) 6.275 (0.64)	76.9 M41 Diversity policies -3.534 (0.477) 0.204 (0.021) 0.003 (0.003) 0.094 (0.134) 0.288 (0.069) 4.33 (0.08)	67.7 M42 Diversity processes -1.314 (0.365) 0.205 (0.017) 0.005 (0.005) 0.156 (0.103) 1.336 (0.103) 3.665 (0.065) 0.701 (0.172)	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) -0.023 (0.017) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012) -0.012	67.4 M44 Emission reduction policy 4.326 (0.466) 0.256 (0.021) 0.003 (0.133) 0.344 (0.068) 0.802 (0.125) 1.581 (0.164)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)   0.034 (0.009)  0.034	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29)  -0.443 (0.135) 0.831 (0.251) 5.214 (0.172) 6.281 (1.038)	82 M39 Child labour policies -6.307 (0.505)  0.025  0.025  0.041  0.652 (0.147)  0.652 (0.132)  5.012 (0.025)  2.765 (0.255)  2.765 (0.255) 	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.228) -0.489 (0.114) 1.158 (0.21) 4.895 (0.14) 6.275 (0.64)	76.9 M41 Diversity policies -3.534 (0.477) 0.204 (0.021) 0.003 (0.003) 0.094 (0.134) -0.288 (0.069) 4.33 (0.18) (0.18) (0.132 (0.213) 2.412	67.7 M42 Diversity processes -1.314 (0.365) 0.205 (0.017) 0.005 (0.003) 0.156 (0.11) -0.701 (0.056) 1.336 (0.103) 3.665 (0.065) 0.741 (0.172) 1.989	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012)	67.4 M44 Emission reduction policy 4.326 (0.466) 0.256 (0.021) (0.003) 0.513 (0.133)0.344 (0.068) 5.091 (0.125) 5.091 (0.091) 1.581 (0.164)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29) 0.043 (0.135) 0.831 (0.251) 6.281 (1.038) 6.281 (1.038) 3.203 (1.759) 0.867 (0.147)	82 M39 Child labour policies -6.307 (0.505) 0.393 (0.025) 0.013 (0.004) 0.678 (0.147) 0.652 (0.132) 5.012 (0.097) 2.765 (0.255) 2.129 (0.25) 1.141 (0.093)	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.228) -0.489 (0.114) 1.158 (0.21) 4.895 (0.14) 6.275 (0.64) (0.678) 2.811 (0.878) 0.825 (0.124)	76.9 M41 Diversity policies -3.534 (0.477)	67.7 M42 Diversity processes -1.314 (0.365)	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) -0.023 (0.017) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012) -0.101 (0.016) (0.016) (0.019)	67.4 M.44 Emission reduction policy 4.326 (0.466) 0.256 (0.021) 0.513 (0.133) 0.513 (0.133) 0.802 (0.125) 1.581 (0.164) (0.1698) 1.65 (0.198) 1.025 (0.123)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  UNGC participant in current year  N R Square	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)   0.034 (0.009)   0.034 (0.011)  0.941 (0.434)  2603  0.952	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29)  -0.443 (0.135) 0.831 (0.251) 5.214 (0.172) 6.281 (1.038) 3.203 (1.759)	82 M39 M39 Child labour policies -6.307 (0.505)  0.025)  0.013 (0.004)  0.678 (0.147)  -0.314 (0.074)  5.012 (0.097) 2.765 (0.252)  2.129 (0.25)  1.141 (0.093)	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.021 (0.005) 0.201 (0.228) -0.489 (0.114) 1.158 (0.21) 4.895 (0.14) 6.275 (0.64) 6.275 (0.64) 6.275 2.811 (0.878) 0.825	76.9 M41 Diversity policies -3.534 (0.477)	67.7 M42 Diversity processes -1.314 (0.365) 0.205 (0.017) 0.005 (0.007) 1.336 (0.103) 1.336 (0.103) 1.336 (0.103) 1.336 (0.103) 1.396 (0.107) 1.989 (0.17) 1.989 (0.17) 0.662	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) -0.023 (0.017) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012) -0.0657 (0.019) -0.229 (0.243)	67.4 M44 Emission reduction policy -4.326 (0.466) 0.256 (0.021) 0.1513 (0.133)0.344 (0.068) 1.025 (0.091) 1.581 (0.164) 1.65 (0.198) 1.025
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  UNGC participant in current year  N  R Square  Adjusted R Square	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)   0.034 (0.009)   0.034 (0.011)   0.941 (0.48)	Forced labour policies  -5.924 (0.502)  0.376 (0.025)  0.615 (0.147)  -0.342 (0.074)  0.693 (0.134)  5.077 (0.1)  2.862 (0.273)  1.814 (0.284)  1.069 (0.091)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29) -0.443 (0.135) 0.831 (0.251) 5.214 (0.172) 6.281 (1.038) 3.203 (1.759) 0.867 (0.147)	82 M39	60.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.228) -0.489 (0.114) 4.895 (0.14) 6.275 (0.64) 2.811 (0.878) 0.825 (0.124)	76.9 M41 Diversity policies -3.534 (0.477) 0.204 (0.021) 0.003 (0.003) 0.094 (0.134) -0.288 (0.069) 0.93 (0.13) 0.132 (0.213) 2.412 (0.185) 1.177 (0.143)	67.7 M42 Diversity processes -1.314 (0.365) 0.205 (0.017) -0.701 (0.056) (0.110) -0.701 (0.056) (0.103) -0.701 (0.056) (0.103) -0.701 (0.056) (0.103) -0.701 (0.056) -0.701	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) .* 0.023 (0.017) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012) .* 0.101 (0.016) .* 0.057 (0.019) .* 0.229 (0.243)	67.4  Metal Emission reduction policy 4.326 (0.466) 0.256 (0.021) 0.007 (0.003) 0.513 (0.133) 0.344 (0.068) 0.802 (0.125) 1.581 (0.164) 1.65 (0.198) 1.05 (0.125) 1.581 (0.164)
Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  UNGC participant in current year  N R Square	Trade union representation  -2.161 (2.1)  0.152 (0.097)  -0.011 (0.012)  -0.148 (0.48)  0.207 (0.315)  -0.707 (0.59)  0.941 (0.008)   0.034 (0.009)   0.034 (0.011)  0.941 (0.434)  2603  0.952	Forced labour policies  -5.924 (0.502)	Forced labour processes  -5.835 (0.877) 0.294 (0.047) 0.013 (0.005) 0.074 (0.29) 0.043 (0.135) 0.831 (0.251) 6.281 (1.038) 6.281 (1.038) 3.203 (1.759) 0.867 (0.147)	82 M39 Child labour policies -6.307 (0.505) 0.393 (0.025) 0.013 (0.004) 0.678 (0.147) 0.652 (0.132) 5.012 (0.097) 2.765 (0.255) 2.129 (0.25) 1.141 (0.093)	69.5 M40 Child labour processes -6.004 (0.739) 0.318 (0.038) 0.022 (0.005) 0.201 (0.228) -0.489 (0.114) 1.158 (0.21) 4.895 (0.14) 6.275 (0.64) (0.678) 2.811 (0.878) 0.825 (0.124)	76.9 M41 Diversity policies -3.534 (0.477)	67.7 M42 Diversity processes -1.314 (0.365)	80.1 M43 Percentage of women managers 2.834 (1.445) -0.136 (0.073) -0.023 (0.017) -0.662 (0.512) -0.362 (0.219) 0.445 (0.445) 0.879 (0.012) -0.0657 (0.019) -0.229 (0.243)	67.4 M.44 Emission reduction policy 4.326 (0.466) 0.256 (0.021) 0.513 (0.133) 0.513 (0.133) 0.802 (0.125) 1.581 (0.164) (0.1698) 1.65 (0.198) 1.025 (0.123)

Model 27 (dependent variable is SOCSCORE) explains 78.1% in variation ( $R^2$ ). Being a UNGC participant is main predictor for higher performance in this variable (Beta=4.007, p<0.01), followed by belonging to the extractive industry (Beta=1.857, p<0.01) and size (Beta=1.224, p<0.01). Being a UNGC participant is also the main predictor in model 26 (dependent variable is ENVSCORE,  $R^2$ =0.798). Good regulatory quality (Beta=1.204, p<0.01) and larger firm size (Beta=1.08, p<0.01) follow as important predictors for overall environment performance. Model 29

( $R^2$ =0.813) has CGVSCORE as the dependent variable. Again, joining is the strongest predictor (Beta=4.852, p<0.01), followed by a more flexible business regulation (Beta=1.926, p<0.01) and belonging to the extractive industry (Beta=1.641, p<0.01).

Models 30 and 31 have the existence of a human rights policy and the implementation of it as the dependent variables. They explain 75.1% and 63.7% of the variation respectively (Nagelkerke  $R^2$ ), and correctly classify 82% and 70% of cases. Signing up to the UNGC, although not in the top three predictors, remains positive and significant in both models (Exp(B)=3.417 and Exp(B)=2.621, p<0.01). Models 32 and 33 have the existence of a human rights policy for the supply chain and the implementation of it as the dependent variables. The models explain 72.9% and 64.1% of variation in the dependent variables (Nagelkerke  $R^2$ ), and correctly classify 76.9% and 67.7% of cases. Joining the UNGC is positive and significant in both cases (Exp(B)=3.376 and Exp(B)=2.806, p<0.01). Previous performance, however, remains the main predictor (Exp(B)=126.22 and Exp(B)=116.4, p<0.01).

Models 34 to 36 focus on freedom of association: dependent variables are existence of policy, implementation and percentage of unionized employees respectively. Models 34 and 35 explain 72.8% and 58.1% of variance (Nagelkerke  $R^2$ ), correctly classifying 80.1% and 67.4% of cases. Joining increases the odds of higher performance in both cases (Exp(B)=2.489 and Exp(B)=2.819, p<0.01), even though previous performance remains the main predictor (Exp(B)=107.3 and Exp(B)=124.1, p<0.01). Model 36 explains 95.2% of variance ( $R^2$ ). Being an UNGC participant (Beta=0.941, p<0.05) and previous performance (Beta=0.941, p<0.01) are the top predictors for unionisation.

Models 37 (Nagelkerke  $R^2$ =0.742) and 38 (Nagelkerke  $R^2$ =535) have the existence of a forced labour policy and its implementation as the dependent variables. They correctly classify 77.6% and 61.3% of cases. Joining the UNGC significantly increases the odds of a firm having a forced labour policy by 2.914 times and of implementing such policies by 2.379 times (p<0.01). Models 39 (Nagelkerke  $R^2$ =0.759) and 40 (Nagelkerke  $R^2$ =0.579) focus on the existence of a child labour policy and its implementation as the dependent variables. These models correctly classify 79.5% and 64.5% of cases, respectively. Being a UNGC participant increases the odds of having a child labour policy by 3.131 times and the odds of implementing these policies by 2.282 times (p<0.01). However, previous performance and peer pressure at industry level remain important predictors too.

Existence of diversity policies, implementation of these and the ratio of female managers are the dependent variables for models 41, 42 and 43. These models explain 70.6%, 66.8% (Nagelkerke R²) and 88% (R²) of the variation in the dependent variables respectively, and models 41 and 42 correctly classify 91.5% and 83.8% of the cases. Being a UNGC participant increases the odds of a firm having a diversity policy by 3.245 times and of implementing such policies by 1.939 (p<0.01). Being a participant, however, has no significant impact on the outcome of such policy, namely the percentage of women managers.

Table 41: Regression table for models 45 to 52

	M45	M46	M47	M48	M49	M50	M51	M52
Models	Resource reduction policy	Environmental management	Environmental expenditures by pre-tax profit	Product innovation policy	Product innovation processes	Anti- corruption policy	Anti- corruption processes	Total donations by pre-tax profit
Constant	-5.027 (0.552) ***	-0.932 (0.413) **	572.595 (754.751)	-4.262 (0.44) ***	-0.625 (0.325) *	-4.038 (0.424) ***	-1.696 (0.396) ***	51.963 (69.225)
Firm Size	0.237 (0.024) ***	0.198 (0.02) ***	-30.864 (43.206)	0.199 (0.021) ***	0.242 (0.016) ***	0.226 (0.019) ***	0.196 (0.019) ***	4.671 (3.216)
ROTA	0.008 (0.004) **	0.006 (0.003) **	-1.688 (8.973)	0.003 (0.003)	0.01 (0.003) ***	0 (0.003)	0.01 (0.003) ***	0.549 (0.63)
Extractive Industry	0.26 (0.141) *	0.585 (0.119) ***	-300.238 (219.076)	-0.061 (0.158)	-0.487 (0.13) ***	0.637 (0.129) ***	0.493 (0.116) ***	27.893 (22.374)
Business regulation	-0.263 (0.078) ***	-0.829 (0.065) ***	37.178 (118.686)	-0.309 (0.067) ***	-0.895 (0.052) ***	-0.245 (0.062) ***	-0.666 (0.062) ***	-17.221 (10.732)
Regulatory quality	0.863 (0.146) ***	1.053 (0.119) ***	-220.868 (233.375)	0.72 (0.127) ***	1.365 (0.095) ***	0.904 (0.117) ***	1.241 (0.115) ***	10.506 (16.887)
LAG Dependent Variable	5.324 (0.104) ***	4.331 (0.076) ***	0.804 (0.009) ***	4.854 (0.081) ***	2.193 (0.054) ***	4.686 (0.086) ***	4.433 (0.086) ***	0.412 (0.065) ***
LAG peer performance in industry	1.285 (0.195) ***	2.718 (0.192) ***	-0.169 (0.036) ***	2.469 (0.158) ***	1.765 (0.151) ***	-0.697 (0.176) ***	-0.437 (0.192) **	-0.08 (0.077)
LAG Peer performance in country	2.134 (0.204) ***	0.888 (0.222) ***	-0.288 (0.09) ***	1.467 (0.209) ***	0.394 (0.164) **	2.813 (0.145) ***	3.072 (0.157) ***	0.996 (0.261) ***
UNGC participant in current year	1.613 (0.209) ***	0.786 (0.082) ***	-52.902 (123.806)	0.67 (0.095) ***	0.577 (0.063) ***	0.738 (0.092) ***	0.522 (0.079) ***	-30.35 (13.842) **
			1981					
N	15024	15024	0.805	15024	15024	15024	15024	4532
R Square			0.804					0.017
Adjusted R Square Nagelkerke R Square	0.801	0.684		0.776	0.416	0.759	0.717	0.015
Percentage correct cases	91.9	75.7		84.4	57.2	86.2	77	
rercemage correct cases	91.9	1.0.7	l	84.4	07.2	80.2	//	

Models 44 and 45 focus on the existence of an emission reduction policy and of a resource reduction policy, respectively. These models explain 78.5% and 80.1% of variance (Nagelkerke R²) respectively, correctly classifying 87.5% and 91.9% of the cases. Being a UNGC participant increases the odds of a firm having an emission reduction policy by nearly 3 times (Exp(B)=2.788, p<0.01). It also increases the odds of a firm having a resource reduction policy by 5.017 times (p<0.01). Model 46 has the implementation of environmental management as the dependent variable; correctly classifying 75.7% of the cases, it explains 68.4% of variance (Nagelkerke R²). Being a participant increase the odds of implementing environmental management measures by 2.195 times (p<0.01). Previous performance, however,

remains the main predictor, increasing the odds of implementation by 76.02 times (p<0.01). Model 47 ( $R^2$ =0.805) has environmental expenditures by pre tax profit as the dependent variable. Being an UNGC participant, in this model, is not significantly associated with higher performance. Key predictors here are previous performance (Beta= 0.804, p<0.01), followed by peer performance at country (Beta= -0.288, p<0.01) and industry levels (Beta=-0.169, p<0.01). Interestingly and different from expected, the last two had a negative coefficient.

Models 48 and 49 focus on the existence of a green innovation policies and the implementation of those. They explain 77.6% and 41.6% of variance (Nagelkerke  $R^2$ ), correctly classifying 84.4% and 57.2% of cases. Being a UNGC participant is a relevant factor for performance in both cases, increasing the odds of a firm having a green innovation policy by nearly two times (Exp(B)=1.953, p<0.01) and of implementing it by 1.781 times (p<0.01). Previous performance (Exp(B)=128.23 and 8.962, p<0.01) and peer performance at industry level (Exp(B)=11.815 and 5.844, p<0.01) are, however, the top two predictors.

Models 50 and 51 focus on UNGC's principle 10, and have the existence of an anti-corruption policy and its implementation as the dependent variables, respectively. These models explain 75.9% and 71.7% of variance (Nagelkerke  $R^2$ ) respectively, correctly classifying 86.2% and 77% of cases. Being a participant has a positive and significant impact on the odds of better performance in anti-corruption efforts, increasing the odds of having a policy by 2.092 times (p<0.01) and of implementing such policies by 1.686 (p<0.01).

Finally, model 52 has total donations by pre tax profit as the dependent variable. This model explains only 1.7% of variance. Surprisingly, being a UNGC participant has a negative and significant impact in this variable (Beta=-30.35, p<0.05). Previous performance (Beta=0.412, p<0.01) and peer performance at country level (Beta=0.996, p<0.01) are significantly associated with higher donations as a percentage of pre tax profit.

The table below synthetises the findings of the models described above. The letter P indicates that the independent variable for joining the UNGC was found to be positive and significant for the dependent variable on that line, N indicates that it was negative and significant and blank indicates that it was not significant.

Table 42: Summary of results for models 27 to 52

		LUNGO
Models	Dependent variable	UNGC participant
	,	in current year
M27	SOCSCORE	Р
M28	ENVSCORE	Р
M29	CGVSCORE	Р
M30	Human Rights policies in house	Р
M31	Human Rights processes in house	Р
M32	Human Rights policies supply chain	Р
M33	Human Rights processes supply chain	Р
M34	Freedom association policy	Р
M35	Freedom association processes	Р
M36	Trade union representation	Р
M37	Forced labour policies	Р
M38	Forced labour processes	Р
M39	Child labour policies	Р
M40	Child labour processes	Р
M41	Diversity policies	Р
M42	Diversity processes	Р
M43	Percentage of women managers	
M44	Emission reduction policy	Р
M45	Resource reduction policy	Р
M46	Environmental management	Р
M47	Environmental expenditures by pre-tax profit	
M48	Product innovation policy	Р
M49	Product innovation processes	Р
M50	Anti-corruption policy	Р
M51	Anti-corruption processes	Р
M52	Total donations by pre-tax profit	N

Table 43 summarises the findings in a different format. It shows that being a participant had a positive and significant impact on performance for 23 out of the 26 dependent variables, or 88.5% of the models. It also had a negative and significant impact on performance on one occasion (or 3.8% of models).

Table 43: Number of times an independent variable was significant for models 27 to 52

Independent variable	Total positive and significant	Percentage of positive and significant	Total negative and significant	Percentage of negative and significant	Total number of models
UNGC participant in current year	23	88.5%	1	3.8%	26

Finally, table 44 indicates the percentage of models within each issue area of the UNGC for which sign up to the UNGC was positive and significant or negative and significant. For example, being a participant had a positive and significant impact on human rights performance variables in 100% of cases but only in 83.3% of environmental performance variables.

Table 44: Percentage of cases where the independent variable was significant by issue

	Human Rights		Lab	our	Environment Anti-corruption			ruption
Independent variable	Percentage of positive and significant	Percentage of negative and significant	Percentage of positive and significant	Percentage of negative and significant	Percentage of positive and significant	Percentage of negative and significant	Percentage of positive and significant	Percentage of negative and significant
UNGC participant in current year	100.0%	0.0%	90.0%	0.0%	83.3%	0.0%	100.0%	0.0%

Table 45: Summary of impact of sign up on policies, processes of implementation and outcomes

	UNGC participa	C participant in current year			
Models	Percentage of	Percentage of			
Wiodelo	positive and	negative and			
	significant	significant			
Dependent variables					
covering the existence of	100.0%	0.0%			
policies					
Dependent variables					
covering the existence of	100.0%	0.0%			
process of implementation					
Dependent variables	25.0%	25.0%			
covering outcomes	25.070	25.070			

Models 53 to 78: Do early joiners improve performance more than late joiners?

Model 53 ( $R^2$ =0.782) has SOCSCORE as the dependent variable, model 54 ( $R^2$ =0.798) focuses on ENVSCORE and model 55 ( $R^2$ =0.814) on CGVSCORE. Early, middle and late joiners all have a positive and significant improvement in performance higher than non-participants, for the three dependent variables. It can be observed, however, that middle joiners improved more in SOCSCORE than the other two (Beta=4.771, p<0.01), late joiners improved more on ENVSCORE than other two (Beta=3.658, p<0.01) and early joiners showed higher increase in CGVSCORE (Beta=5.348, p<0.01).

Table 46: Regression tables for models 53 to 70

	M53	M54	M55	M56	M57	M58	M59	M60	M61
Madala	WIOO	WIOT	WIOO	Human	Human	Human Rights	Human Rights	Freedom	Freedom
Models	SOCSCORE	ENVSCORE	CGVSCORE	Rights policies in	Rights processes	policies supply	processes supply	association policy	association processes
				house	in house	chain	chain	. ,	
	-16.489	-12.291	-17.405	-4.564	-4.294	-6.075	-4.55	-5.778	-4.341
Constant	(1.86)	(1.77)	(1.592)	(0.458)	(0.546)	(0.494)	(0.579)	(0.516)	(0.693)
	1.244	1.112	0.688	0.229	0.331	0.356	0.364	0.295	0.259
Firm Size	(0.079)	(0.078)	(0.067)	(0.022)	(0.029)	(0.025)	(0.031)	(0.025)	(0.037)
	***	***	***	***	***	***	***	***	***
DOTA	0.017	0.014	-0.006	0.002	0.005	0.01	0.016	0.008	0.014
ROTA	(0.011)	(0.011)	(0.01)	(0.003)	(0.005)	(0.003)	(0.004)	(0.004)	(0.005)
	2.026	0.000	1.629	0.759	0.843	0.007		0.874	0.367
Extractive Industry	(0.487)	0.803 (0.493)	(0.463)	(0.131)	(0.157)	0.227 (0.155)	0.202 (0.189)	(0.148)	(0.204)
	***	(0.400)	***	***	***			***	*
Business regulation	1.012 (0.238)	0.031	1.882 (0.214)	-0.293 (0.067)	-0.565 (0.083)	-0.337 (0.073)	-0.786 (0.09)	-0.333 (0.076)	-0.527 (0.104)
Dusiness regulation	(0.230)	(0.237)	***	***	***	***	***	(0.070)	***
	-0.572	1.3	-0.219	0.534	0.638	0.876	1.531	0.906	0.645
Regulatory quality	(0.415)	(0.423)	(0.425)	(0.121)	(0.149)	(0.133)	(0.171)	(0.137)	(0.182)
	, ,	0.818		4.637	4.751	4.836	4.758	4.070	4.00
LAG Dependent Variable	0.796 (0.005)	(0.005)	0.642 (0.006)	(0.078)	(0.105)	(0.095)	(0.117)	4.679 (0.084)	4.82 (0.127)
Erto Dependent variable	***	***	***	***	***	***	***	***	***
	0.113	0.13	0.017	1.523	3.654	2.258	4.791	1.472	1.141
LAG peer performance in industry	(0.012)	(0.009)	(0.014)	(0.25)	(0.506)	(0.264)	(0.455)	(0.347)	(1.042)
	0.104	0.089	0.34	2.437	2.149	2.494	2.357	2.753	2.073
LAG Peer performance in country	(0.011)	(0.011)	(0.008)	(0.199)	(0.472)	(0.252)	(0.473)	(0.249)	(0.66)
	***	***	***	***	***	***	***	***	***
	2.204	1.293	5.348	1.189	1.081	1.088	1.094	0.831	1.265
Early	(0.553)	(0.553)	(0.482)	(0.149)	(0.137)	(0.136)	(0.145)	(0.145)	(0.166)
	4.771	3.21	4.382	1.345	1.069	1.346	1.079	1.074	1.18
Middle	(0.436)	(0.438)	(0.379)	(0.108)	(0.113)	(0.106)	(0.119)	(0.114)	(0.141)
	***	***	***	` ***	***	***	***	***	***
	4.095	3.658	3.692	0.949	0.848	0.955	0.838	0.941	1.207
Late	(0.415)	(0.422)	(0.374)	(0.101)	(0.12)	(0.104)	(0.127)	(0.109)	(0.146)
N	15921	15921	15921	15287	15287	15287	15287	15287	15287
R Square	0.782	0.798	0.814						
Adjusted R Square	0.782	0.798	0.813	0.754	0.044	0.72	0.04	0.70	0.507
Adjusted R Square Nagelkerke R Square	0.782	0.798	0.813	0.754 81.9	0.641 69.5	0.73 76.6	0.64 67.5	0.73	0.587 67.2
Adjusted R Square	0.782 M62	0.798 M63	0.813 M64	0.754 81.9 M65	0.641 69.5 M66	0.73 76.6 M67	0.64 67.5 M68	0.73 80 M69	0.587 67.2 M70
Adjusted R Square Nagelkerke R Square Percentage correct cases	M62	M63	M64	81.9 M65	69.5 M66	76.6 M67	67.5 M68	80 M69 Percentage	67.2 M70 Emission
Adjusted R Square Nagelkerke R Square				81.9	69.5	76.6	67.5	80 M69 Percentage of women	67.2 M70 Emission reduction
Adjusted R Square Nagelkerke R Square Percentage correct cases	M62 Trade union representation	M63 Forced labour policies	M64 Forced labour processes	81.9 M65 Child labour policies	69.5 M66 Child labour processes	76.6 M67 Diversity policies	67.5 M68 Diversity processes	M69 Percentage of women managers	67.2 M70 Emission reduction policy
Adjusted R Square Nagelkerke R Square Percentage correct cases	M62 Trade union representation -2.534	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363)	80 M69 Percentage of women	67.2 M70 Emission reduction policy -4.224 (0.466)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models	M62 Trade union representation -2.534 (2.093)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363)	80 M69 Percentage of women managers 2.633 (1.468)	67.2 M70 Emission reduction policy -4.224 (0.466)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant	M62 Trade union representation -2.534 (2.093) 0.18	M63 Forced labour policies -6.14 (0.506) *** 0.384	M64 Forced labour processes -5.769 (0.876) *** 0.29	81.9 M65 Child labour policies -6.395 (0.508) ***	69.5 M66 Child labour processes -6.007 (0.738) ***	76.6 M67 Diversity policies -3.67 (0.474) ***	67.5 M68 Diversity processes -1.426 (0.363) ***	80 M69 Percentage of women managers 2.633 (1.468) *	67.2 M70 Emission reduction policy -4.224 (0.466) ***
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models	M62 Trade union representation -2.534 (2.093)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363)	80 M69 Percentage of women managers 2.633 (1.468)	67.2 M70 Emission reduction policy -4.224 (0.466)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant	M62 Trade union representation -2.534 (2.093) 0.18 (0.097)	M63 Forced labour policies -6.14 (0.506) **** 0.384 (0.026)	M64 Forced labour processes -5.769 (0.876) **** 0.29 (0.048)	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017)	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075)	67.2 M70 Emission reduction policy -4.224 (0.466) *** 0.245 (0.021)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant	M62 Trade union representation -2.534 (2.093) 0.18 (0.097)	M63 Forced labour policies -6.14 (0.506) *** 0.384 (0.026) *** 0.009 (0.004)	M64 Forced labour processes -5.769 (0.876) *** 0.29 (0.048) *** 0.013 (0.005)	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) ***	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003)	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016)	67.2 M70 Emission reduction policy -4.224 (0.466) *** 0.245 (0.021) *** 0.007 (0.003)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size	M62 Trade union representation -2.534 (2.093) 0.18 (0.097)	M63 Forced labour policies -6.14 (0.506) **** 0.384 (0.026) *** 0.009 (0.004) ***	M64 Forced labour processes -5.769 (0.876) **** 0.29 (0.048) **** 0.013	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) ***	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) ***	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) *	67.2 M70 Emission reduction policy -4.224 (0.466) *** 0.245 (0.021) *** 0.007 (0.003) **
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)  -0.019	M63 Forced labour policies -6.14 (0.506) -384 (0.026) -0.009 (0.004) -0.651	M64 Forced labour processes -5.769 (0.876) *** 0.29 (0.048) *** 0.013 (0.005) ** 0.107	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004) ***	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) ***	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003) ***	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) *	67.2 M70 Emission reduction policy -4.224 (0.466) *** 0.245 (0.021) *** 0.007 (0.003) **
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)	M63 Forced labour policies -6.14 (0.506) **** 0.384 (0.026) *** 0.009 (0.004) ***	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) ***	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) ***	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) *	67.2 M70 Emission reduction policy -4.224 (0.466) *** 0.245 (0.021) *** 0.007 (0.003) **
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry	M62 Trade union representation -2.534 (2.093) 0.18 (0.097)	M63 Forced labour policies -6.14 (0.506) -384 (0.026) -0.009 (0.004) -0.651 (0.147) -0.352	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004) *** 0.721 (0.147) -0.34	69.5 M66 Child labour processes -6.007 (0.738) 	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292	67.5 M68 Diversity processes -1.426 (0.363) ** 0.211 (0.017) ** 0.005 (0.003) ** 0.18 (0.11)	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509)	67.2 M70 Emission reduction policy -4.224 (0.466) 0.245 (0.021) 0.007 (0.003) 0.493 (0.132)0.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)  -0.019	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004) 0.051 (0.147)0.352 (0.074)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) 0.107 (0.287)	81.9 M65 Child labour policies -6.395 (0.508) *** 0.4 (0.026) *** 0.013 (0.004) *** 0.721 (0.147) *** -0.34 (0.074)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) *** 0.235 (0.226) -0.496 (0.112)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003) ** 0.18 (0.11) -0.704 (0.056)	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) *	67.2 M70 Emission reduction policy -4.224 (0.466) 0.245 (0.021) 0.007 (0.003) 0.493 (0.132) 0.361 (0.067)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)	M63 Forced labour policies -6.14 (0.506) *** 0.384 (0.026) *** 0.009 (0.004) *** 0.651 (0.147) *** -0.352 (0.074) ***	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) *** 0.235 (0.226) -0.496 (0.112)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069)	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) *** 0.005 (0.003) ** 0.18 (0.11) -0.704 (0.056) ***	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509) -0.333 (0.22)	67.2 M70 Emission reduction policy -4.224 (0.466) -5.245 (0.021) -5.245 (0.007 (0.003) -5.245 -6.361 (0.067) -6.361 (0.067) -6.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074) 0.686	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) *** 0.235 (0.226) -0.496 (0.112) *** 1.142	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) ***	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) 0.03 (0.016) -0.684 (0.509) -0.333 (0.22)	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.493 (0.132) -0.361 (0.067) -0.361 (0.067) -0.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)	M63 Forced labour policies -6.14 (0.506) *** 0.384 (0.026) *** 0.009 (0.004) *** 0.651 (0.147) *** -0.352 (0.074) ***	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074)	69.5 M66 Child labour processes -6.007 (0.738) *** 0.322 (0.039) *** 0.021 (0.005) *** 0.235 (0.226) -0.496 (0.112)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069)	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) *** 0.005 (0.003) ** 0.18 (0.11) -0.704 (0.056) ***	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509) -0.333 (0.22)	67.2 M70 Emission reduction policy -4.224 (0.466) -5.245 (0.021) -5.245 (0.007 (0.003) -5.245 -6.361 (0.067) -6.361 (0.067) -6.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598)  0.941	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 4.998	69.5 M66 Child labour processes -6.007 (0.738) 	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.017) -1.426 (0.017) -1.426 (0.003) -1.426 (0.003) -1.426 (0.003) -1.426 (0.003) -1.426 (0.003) -1.426 (0.003) -1.426 (0.003) -1.426 (0.101) -0.704 (0.056) -1.328 (0.102) -1.328 (0.102) -1.328 (0.102)	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.361 (0.067) -0.361 (0.067) -0.361 (0.067) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012) -0.019 (0.478) 0.161 (0.313) -0.531 (0.598) 0.941 (0.008)	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.051 (0.147)0.352 (0.074) 0.721 (0.133) 5.079 (0.1)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171)	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003) ** 0.18 (0.111) -0.704 (0.056) *** 1.328 (0.102) *** 3.665 (0.065)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012)	67.2 M70 Emission reduction policy -4.224 (0.466) 0.245 (0.021) 0.007 (0.003) 0.493 (0.132) 0.361 (0.067) 0.817 (0.124) 5.112 (0.091)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ***	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171)	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) ***	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.011) -0.005 (0.003) -0.704 (0.056) -1.328 (0.102) -1.328 (0.102) -1.328 (0.065) -1.328	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) 0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012)	67.2 M70 Emission reduction policy 4.224 (0.466) -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.361 (0.067) -0.361 (0.124) -0.361 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.317 (0.124) -1.300 -1.
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598)  0.941 (0.008) ***	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.051 (0.147)0.352 (0.074) 0.721 (0.133) 5.079 (0.1)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 4.998 (0.096) 2.976	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) (0.065) 0.737	80 M69 Percentage of women managers 2.633 (1.468) * -0.138 (0.075) * 0.03 (0.016) * -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.361 (0.067) -0.361 (0.067) -0.361 (0.067) -0.361 (0.124) -0.361 (0.124) -1.724
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ***  0.034 (0.009) ***	M63 Forced labour policies -6.14 (0.506) *** 0.384 (0.026) *** 0.009 (0.004) *** -0.352 (0.074) *** 0.721 (0.133) *** 5.079 (0.1) *** 3.134 (0.274) ***	M64 Forced labour processes -5.769 (0.876) **** 0.29 (0.048) *** 0.013 (0.005) *** 0.107 (0.287) -0.454 (0.134) *** 0.825 (0.248) *** 5.219 (0.171) *** 6.393 (1.025) ***	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003)  0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.017) -0.005 (0.003) -0.704 (0.056) -1.328 (0.102) -1.328 (0.102) -1.328 (0.102) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) 0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012)	67.2 M70 Emission reduction policy 4.224 (0.466) -4.224 (0.466) -6.245 (0.021) -7.245 (0.003) -7.245 (0.067) -7.245 (0.132) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097)  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598)  0.941 (0.008)  0.034 (0.009) 0.034 (0.009) 0.041	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 4.998 (0.096) (0.253) (0.253) 2.976 (0.253)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) 0.737 (0.171) 2.126	80 M69 Percentage of women managers 2.633 (1.468)	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.361 (0.067) -0.361 (0.067) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -1.542
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ***  0.034 (0.009) ***	M63 Forced labour policies -6.14 (0.506) *** 0.384 (0.026) *** 0.009 (0.004) *** -0.352 (0.074) *** 0.721 (0.133) *** 5.079 (0.1) *** 3.134 (0.274) ***	M64 Forced labour processes -5.769 (0.876) **** 0.29 (0.048) *** 0.013 (0.005) *** 0.107 (0.287) -0.454 (0.134) *** 0.825 (0.248) *** 5.219 (0.171) *** 6.393 (1.025) ***	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003)  0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.017) -0.005 (0.003) -0.704 (0.056) -1.328 (0.102) -1.328 (0.102) -1.328 (0.102) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107) -1.328 (0.107)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) 0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012)	67.2 M70 Emission reduction policy 4.224 (0.466) -4.224 (0.466) -6.245 (0.021) -7.245 (0.003) -7.245 (0.067) -7.245 (0.132) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245 (0.124) -7.245
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012) -0.019 (0.478) 0.161 (0.313) -0.531 (0.598) 0.941 (0.008) *** 0.034 (0.009) *** 0.041 (0.011) ***	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.051 (0.147)0.352 (0.074) 5.079 (0.1) 3.134 (0.274) 1.891 (0.278)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074)0.686 (0.13) 4.998 (0.096) 2.976 (0.253) 2.222 (0.245)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003) **  0.18 (0.11) -0.704 (0.056) *** 1.328 (0.102) *** 3.665 (0.065) *** 0.737 (0.171) *** 2.126 (0.169)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) -0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) -0.107 (0.016) -0.06 (0.019) -0.06	67.2 M70 Emission reduction policy -4.224 (0.466) 0.245 (0.021) 0.007 (0.003) 0.493 (0.132) 0.361 (0.067) 0.817 (0.124) 5.112 (0.091) 1.724 (0.164) 1.542 (0.196)
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ****  0.034 (0.009) ****  0.041 (0.011) ****	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 3.871 (1.712) 0.867 (0.21)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074)1 -0.686 (0.13) 4.998 (0.096) 2.976 (0.253) 2.222 (0.245) 0.91 (0.144)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179)	76.6 M67 Diversity policies -3.67 (0.474) *** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214)	67.5 M68 Diversity processes -1.426 (0.363) *** 0.211 (0.017) *** 0.005 (0.003) **  0.18 (0.11) -0.704 (0.056) *** 1.328 (0.102) *** 2.126 (0.169) *** 0.495 (0.128)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) -0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.06 (0.019) 0.06 (0.019)	67.2 M70 Emission reduction policy -4.224 (0.466) 0.245 (0.021) 0.007 (0.003) 0.493 (0.132) 0.361 (0.067) 0.817 (0.124) 5.112 (0.091) 1.724 (0.164) 1.542 (0.196) 0.989 (0.201)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG Peer performance in industry  LAG Peer performance in country	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012) -0.019 (0.478) 0.161 (0.313) -0.531 (0.598) 0.941 (0.008) *** 0.034 (0.009) *** 0.041 (0.011) ***	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) *** 0.29 (0.048) *** 0.013 (0.005) ***  0.107 (0.287) -0.454 (0.134) ***  0.825 (0.248) *** 5.219 (0.171) *** 6.393 (1.025) *** 3.871 (1.712) *** 0.867 (0.21) ***	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.017) -0.005 (0.003) -1.328 (0.11) -0.704 (0.056) -1.328 (0.102) -1.328 (	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) -0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) -0.107 (0.016) -0.06 (0.019) -0.06	67.2 M70 Emission reduction policy -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -6.361 (0.067) -6.361 (0.091) -7.24 (0.164) -7.24 (0.164) -7.24 (0.164) -7.24 (0.166) -7.26 (0.166) -7.27 (0.166) -7.28 (0.166) -7.29 (0.166) -7.20 (0.166)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  Early	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ****  0.034 (0.009) ****  0.041 (0.011) ****  -0.514 (0.695)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 4.998 (0.096) (0.253) (0.245) 2.222 (0.245) 0.91 (0.144) 1.171	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179) 0.74	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) (0.065) 2.126 (0.169) 0.495 (0.128) (0.128)	80 M69 Percentage of women managers 2.633 (1.468)0.138 (0.075) 0.03 (0.016)0.684 (0.509)0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.217 (0.333)	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.493 (0.132) -0.361 (0.067) -0.817 (0.124) -0.124 -0.124 (0.164) -1.724 (0.164) -1.542 (0.196) -1.542 (0.196) -1.102
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012) -0.019 (0.478) 0.161 (0.313) -0.531 (0.598) 0.941 (0.008) 0.034 (0.009) 0.041 (0.011)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) *** 0.29 (0.048) *** 0.013 (0.005) ***  0.107 (0.287) -0.454 (0.134) ***  0.825 (0.248) *** 5.219 (0.171) *** 6.393 (1.025) *** 3.871 (1.712) *** 0.867 (0.21) ***	81.9 M65 Child labour policies -6.395 (0.508)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.017) -0.005 (0.003) -1.328 (0.11) -0.704 (0.056) -1.328 (0.102) -1.328 (	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) -0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) -0.06 (0.019) -0.217 (0.333)	67.2 M70 Emission reduction policy -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -6.361 (0.067) -6.361 (0.091) -7.24 (0.164) -7.24 (0.164) -7.24 (0.164) -7.24 (0.166) -7.26 (0.166) -7.27 (0.166) -7.28 (0.166) -7.29 (0.166) -7.20 (0.166)
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  Early	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 3.871 (1.712) 0.867 (0.21)	81.9 M65 Child labour policies -6.395 (0.508) -6.395 (0.508) 0.4 (0.026) -0.013 (0.004)0.34 (0.074)0.38 (0.074)0.686 (0.13) 4.998 (0.096) 2.976 (0.253) 2.222 (0.245)0.91 (0.144)1.771 (0.112)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.017) -0.704 (0.056) -1.328 (0.102) -1.328	80 M69 Percentage of women managers 2.633 (1.468)0.138 (0.075) 0.03 (0.016)0.684 (0.509)0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.217 (0.333) 0.29 (0.298)	67.2 M70 Emission reduction policy -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -4.224 (0.466) -6.245 (0.021) -7.24 (0.087) -7.24 (0.124) -7.24 (0.194) -7.24 (0.196)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  Early	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ****  0.034 (0.009) ****  0.041 (0.011) ****  -0.514 (0.695)  0.773 (0.514)	M63 Forced labour policies -6.14 (0.506) -6.18 (0.026) -6.19	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 3.871 (1.712) 0.867 (0.21) 0.806 (0.18)	81.9 M65 Child labour policies -6.395 (0.508) -6.395 (0.508) 0.4 (0.026) -6.395 (0.508) -6.395 (0.508) -6.395 (0.508) -6.395 (0.508) -6.395 (0.044) -6.34 (0.074) -7.21 (0.147) -7.34 (0.074) -7.21 (0.13) -7.22 (0.225) -7.23 (0.225) -7.24 (0.144) -7.25 (0.112) -7.26 (0.112) -7.27 (0.112) -7.27 (0.112) -7.27 (0.112) -7.27 (0.105)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152) *** 0.462 (0.117)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.011) -0.005 (0.003) -1.328 (0.111) -0.704 (0.056) -1.328 (0.102) -1.328	80 M69 Percentage of women managers 2.633 (1.468)	67.2 M70 Emission reduction policy -4.224 (0.466) -4.224 (0.466) -6.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.003) -7.007 (0.104) -7.007 (0.124) -7.1724 (0.164) -7.1724 (0.164) -7.1724 (0.196) -7.1724 (0.196) -7.1724 (0.129) -7.1724 (0.129) -7.1724 (0.115)
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG peer performance in industry  LAG Peer performance in country  Early  Middle	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008)	M63 Forced labour policies -6.14 (0.506)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 6.393 (1.025) 1.025 0.867 (0.21) 0.806 (0.18)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 4.998 (0.096) 2.976 (0.253) (0.245) 2.222 (0.245) 0.91 (0.144) 1.171 (0.112) 0.992	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179) 0.74 (0.153) 0.74 (0.153)	76.6 M67 Diversity policies -3.67 (0.474)	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) 0.737 (0.171) 2.126 (0.169) (0.128) 0.495 (0.128) 0.596 (0.1)	80 M69 Percentage of women managers 2.633 (1.468)0.138 (0.075) 0.03 (0.016)0.684 (0.509)0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.217 (0.333) 0.29 (0.298)	67.2 M70 Emission reduction policy -4.224 (0.466) -0.245 (0.021) -0.007 (0.003) -0.361 (0.067) -0.361 (0.067) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361 (0.124) -0.361
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG Peer performance in industry  LAG Peer performance in country  Early  Middle  Late	M62 Trade union representation  -2.534 (2.093)  0.18 (0.097) -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598)  0.941 (0.008) 0.034 (0.009) 0.041 (0.011)	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.352 (0.074) 0.721 (0.133) 5.079 (0.1) 1.891 (0.278) 1.891 (0.142) 1.147 (0.11) 0.99 (0.105)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 1.712 0.867 (0.21) 0.806 (0.18)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 2.976 (0.253) 2.222 (0.245) 0.91 (0.144) 1.171 (0.112) 0.992 (0.105)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179) 0.74 (0.153) 0.567 (0.165)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152) *** 0.462 (0.117) ***	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) 0.737 (0.171) 2.126 (0.169) 0.495 (0.128) 0.596 (0.1) 0.428 (0.095)	80 M69 Percentage of women managers 2.633 (1.468) -0.138 (0.075) 0.03 (0.016) -0.684 (0.509) -0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.217 (0.333) 0.29 (0.298) -0.331 (0.348)	67.2 M70 Emission reduction policy -4.224 (0.466)
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG Peer performance in industry  LAG Peer performance in country  Early  Middle	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ****  0.034 (0.009) ****  0.041 (0.011) ****  -0.514 (0.695)  0.773 (0.514)	M63 Forced labour policies -6.14 (0.506) -6.18 (0.026) -6.19	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 3.871 (1.712) 0.867 (0.21) 0.806 (0.18)	81.9 M65 Child labour policies -6.395 (0.508) -6.395 (0.508) 0.4 (0.026) -6.395 (0.508) -6.395 (0.508) -6.395 (0.508) -6.395 (0.508) -6.395 (0.044) -6.34 (0.074) -7.21 (0.147) -7.34 (0.074) -7.21 (0.13) -7.22 (0.225) -7.23 (0.225) -7.24 (0.144) -7.25 (0.112) -7.26 (0.112) -7.27 (0.112) -7.27 (0.112) -7.27 (0.112) -7.27 (0.105)	69.5 M66 Child labour processes -6.007 (0.738)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152) *** 0.462 (0.117)	67.5 M68 Diversity processes -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.363) -1.426 (0.011) -0.005 (0.003) -1.328 (0.111) -0.704 (0.056) -1.328 (0.102) -1.328	80 M69 Percentage of women managers 2.633 (1.468)	67.2 M70 Emission reduction policy -4.224 (0.466) -4.224 (0.466) -6.007 (0.003) -7.007 (0.003) -
Adjusted R Square Nagelkerke R Square Percentage correct cases  Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG Peer performance in industry  LAG Peer performance in country  Early  Middle  Late  N  R Square  Adjusted R Square	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) 0.034 (0.009) 0.014 (0.011) 0.514 (0.695) 0.773 (0.514) 0.707 (0.567)	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.352 (0.074) 0.721 (0.133) 5.079 (0.1) 1.891 (0.278) 1.891 (0.142) 1.147 (0.11) 0.99 (0.105)	M64 Forced labour processes -5.769 (0.876)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147) 0.686 (0.13) 4.998 (0.096) 2.976 (0.253) 2.222 (0.245) 0.91 (0.144) 1.171 (0.112) 0.992 (0.105)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179) 0.74 (0.153) 0.567 (0.165)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152) *** 0.462 (0.117) *** 15287	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) 2.126 (0.169) 0.495 (0.128) 0.596 (0.1) 0.428 (0.095)	80 M69 Percentage of women managers 2.633 (1.468)0.138 (0.075) 0.03 (0.016)0.684 (0.509)0.333 (0.22) 0.386 (0.444) 0.874 (0.012) 0.107 (0.016) 0.06 (0.019) 0.217 (0.333) 0.29 (0.298)0.331 (0.348)	67.2 M70 Emission reduction policy -4.224 (0.466)
Adjusted R Square Nagelkerke R Square Percentage correct cases Models  Constant  Firm Size  ROTA  Extractive Industry  Business regulation  Regulatory quality  LAG Dependent Variable  LAG Peer performance in industry  LAG Peer performance in country  Early  Middle  Late  N R Square	M62 Trade union representation  -2.534 (2.093) 0.18 (0.097) *  -0.012 (0.012)  -0.019 (0.478)  0.161 (0.313)  -0.531 (0.598) 0.941 (0.008) ****  0.034 (0.009) ****  -0.514 (0.695)  0.773 (0.514)  0.707 (0.567)	M63 Forced labour policies -6.14 (0.506) 0.384 (0.026) 0.009 (0.004)0.352 (0.074) 0.721 (0.133) 5.079 (0.1) 1.891 (0.278) 1.891 (0.142) 1.147 (0.11) 0.99 (0.105)	M64 Forced labour processes -5.769 (0.876) 0.29 (0.048) 0.107 (0.287) -0.454 (0.134) 0.825 (0.248) 5.219 (0.171) 6.393 (1.025) 1.712 0.867 (0.21) 0.806 (0.18)	81.9 M65 Child labour policies -6.395 (0.508) 0.4 (0.026) 0.013 (0.004) 0.721 (0.147)0.34 (0.074) 0.686 (0.13) 2.976 (0.253) 2.222 (0.245) 0.91 (0.144) 1.171 (0.112) 0.992 (0.105)	69.5 M66 Child labour processes -6.007 (0.738) 0.322 (0.039) 0.021 (0.005) 0.235 (0.226) -0.496 (0.112) 1.142 (0.206) 4.892 (0.139) 6.329 (0.638) 3.191 (0.856) 0.784 (0.179) 0.74 (0.153) 0.567 (0.165)	76.6 M67 Diversity policies -3.67 (0.474) **** 0.2 (0.021) *** 0.003 (0.003) 0.115 (0.134) -0.292 (0.069) *** 0.931 (0.129) *** 4.342 (0.08) *** -0.002 (0.213) 2.515 (0.184) *** 0.829 (0.214) *** 1.15 (0.152) *** 0.462 (0.117) ***	67.5 M68 Diversity processes -1.426 (0.363) 0.211 (0.017) 0.005 (0.003) 0.18 (0.11) -0.704 (0.056) 1.328 (0.102) 3.665 (0.065) 0.737 (0.171) 2.126 (0.169) 0.495 (0.128) 0.596 (0.1) 0.428 (0.095)	80 M69 Percentage of women managers 2.633 (1.468)0.138 (0.075) 0.03 (0.016)0.684 (0.509)0.333 (0.22) 0.386 (0.444) 0.107 (0.012) 0.06 (0.019) 0.217 (0.333) 0.29 (0.298)0.331 (0.348)	67.2 M70 Emission reduction policy -4.224 (0.466)

Models 56 and 57 focus on existence of a human rights policy (56) and on evidence of implementation (57), respectively. They explain 75.4% and 64.1% of variance (Nagelkerke R²) respectively, and correctly classify 81.9% and 69.5% of cases. Joining in all periods has a positive and significant impact on improved performance in both cases, even though being a middle joiner (EXP(B)=3.837, p<0.01) has a greater impact on the existence of policy, while early joiners (EXP(B)=2.946, p<0.01) have slightly higher odds of implementing them. Model 58 and model 59 focus on the existence of a supply chain human rights policy (58) and its implementation (59) as dependent variables. They explain 73% and 64% of the variation (Nagelkerke R²) respectively, correctly classifying 76.6% and 67.5% of cases.

Existence of a freedom of association policy (60), its implementation (61) and level of unionisation (62) are the dependent variables for the next three models. They explain, respectively, 73%, 58.7% (Nagelkerke R²) and 95.3% (R²) of variation, and the first two correctly classify 80% and 67.2% of cases. Sign up in every stage is positively and significantly associated with higher odds of improved performance for models 60 and 61, although, as in previous models, middle joiners have slightly higher odds of improving performance in regards to the existence of policies and early joiners of improvements on the implementation of such policies. None of them, however, is significantly associated with higher levels of unionisation.

Models 63 (Nagelkerke  $R^2$ =0.745) and 64 (Nagelkerke  $R^2$ =0.531) have existence of a forced labour policy and its implementation as dependent variables. They correctly classify 77.6% and 61% of cases. Existence of a child labour policy and its implementation are the dependent variables for models 65 and 66. They explain 76% and 57.6% of variation (Nagelkerke  $R^2$ ) respectively, and correctly classify 79.4% and 64.5% of cases. As before, while joining in every stage is positively and significantly associated with higher odds of improved performance, middle joiners have slightly higher odds of improving performance in regards to the existence of policies (Exp(B)=3.149 for model 63, and Exp(B)=3.226 for model 65, p<0.01) and early joiners of improvements on the implementation of such policies (Exp(B)=2.38 for model 64 and Exp(B)=2.19 for model 66, p<0.01).

Existence of diversity policies, implementation of these and the ratio of female managers are the dependent variables for models 67, 68 and 69. These models explain 70.8%, 66.8% (Nagelkerke  $R^2$ ) and 88.1% ( $R^2$ ) of the variation in the dependent variables respectively, and models 67 and 68 correctly classify 91.5% and 83.9% of the cases. In models 67 and 68, joining in every stage is positively and

significantly associated with higher odds of improved performance, although middle joiners have slightly higher odds of improving performance in regards to the existence of policies (Exp(B)=3.157, p<0.01) and to the implementation of those (Exp(B)=1.814, p<0.01). None of them is significant in model 69.

Table 47: Regression table for models 71 to 78

	M71	M72	M73	M74	M75	M76	M77	M78
Models	Resource reduction policy	Environmental management	Environmental expenditures by pre-tax profit	Product innovation policy	Product innovation processes	Anti- corruption policy	Anti- corruption processes	Total donations by pre-tax profit
Constant	-4.855 (0.55) ***	-0.855 (0.414) **	504.505 (758.307)	-4.084 (0.438) ***	-0.553 (0.325) *	-4.115 (0.423) ***	-1.751 (0.395) ***	51.656 (69.472)
Firm Size	0.228 (0.024) ***	0.188 (0.02) ***	-26.708 (43.924)	0.187 (0.021) ***	0.225 (0.016) ***	0.227 (0.019) ***	0.201 (0.019) ***	3.406 (3.297)
ROTA	0.008 (0.004) **	0.007 (0.003) **	-1.59 (8.867)	0.003 (0.003)	0.01 (0.003) ***	0 (0.003)	0.01 (0.003) ***	0.535 (0.63)
Extractive Industry	0.291 (0.14) **	0.591 (0.118) ***	-279.445 (217.796)	-0.06 (0.157)	-0.48 (0.131) ***	0.654 (0.129) ***	0.508 (0.115) ***	22.359 (22.401)
Business regulation	-0.292 (0.077) ***	-0.854 (0.065) ***	31.883 (118.132)	-0.326 (0.067) ***	-0.905 (0.051) ***	-0.25 (0.062) ***	-0.665 (0.062) ***	-14.649 (10.757)
Regulatory quality	0.867 (0.145) ***	1.097 (0.118) ***	-181.445 (232.84)	0.722 (0.126) ***	1.397 (0.095) ***	0.897 (0.116) ***	1.23 (0.114) ***	6.219 (17.016)
LAG Dependent Variable	5.338 (0.104) ***	4.325 (0.076) ***	0.804 (0.009) ***	4.862 (0.08) ***	2.16 (0.054) ***	4.689 (0.085) ***	4.433 (0.085) ***	0.422 (0.065) ***
LAG peer performance in industry	1.51 (0.197) ***	2.922 (0.192) ***	-0.169 (0.036) ***	2.544 (0.157) ***	1.953 (0.152) ***	-0.642 (0.175) ***	-0.375 (0.19) **	-0.086 (0.077)
LAG Peer performance in country	1.993 (0.203) ***	0.921 (0.218) ***	-0.293 (0.088) ***	1.367 (0.207) ***	0.361 (0.162) **	2.913 (0.145) ***	3.087 (0.155) ***	1.02 (0.261) ***
Early	1.267 (0.35) ***	0.799 (0.128) ***	-150.426 (196.126)	0.714 (0.153) ***	0.805 (0.095) ***	0.615 (0.142) ***	0.425 (0.124) ***	-12.079 (22.593)
Middle	1.39 (0.199) ***	0.87 (0.097) ***	38.065 (155.028)	0.725 (0.11) ***	0.68 (0.076) ***	0.766 (0.107) ***	0.432 (0.096) ***	-0.347 (16.779)
Late	0.747 (0.142) ***	0.637 (0.099) ***	14.287 (162.265)	0.509 (0.109) ***	0.63 (0.076) ***	0.447 (0.105) ***	0.24 (0.099) **	-63.609 (20.218) ***
N R Square Adjusted R Square	15287	15287	2002 0.805 0.804	15287	15287	15287	15287	4532 0.019 0.016
Nagelkerke R Square Percentage correct cases	0.802 91.9	0.687 75.7	0.304	0.776 84.4	0.42 56.3	0.761 86.3	0.717 76.9	3.310

Model 70 (Nagelkerke  $R^2$ =0.788) and model 71 (Nagelkerke  $R^2$ =0.802) focus on the existence of policies for emission and resource reduction, respectively. They correctly classify 87.6% (70) and 91.9% (71) of cases. Model 72 (Nagelkerke  $R^2$ =0.687) has the implementation of environmental management as the dependent variable and correctly classifies 75.7% of cases. All stages of sign up are positive and significant in these three models; however, in these three cases middle joiners have slightly higher odds of developing such policies (Exp(B)= 3.009 and 4.017, p<0.01, respectively) and putting an environmental management structure in place (Exp(B)=2.388, p<0.01). Environment expenditure by pre tax profit is the dependent variable for model 73 ( $R^2$ =0.805). For this model none of the sign up measures are significant.

Having an environment product innovation policy and implementing it are the dependent variables for models 74 and 75. These models explain 77.6% and 42% of variance (Nagelkerke  $R^2$ ) and correctly classify 84.4% and 56.3% of cases, respectively. While joining in every stage is positively and significantly associated with higher odds of improved performance, middle joiners have slightly higher odds of improving performance in regards to the existence of policies (Exp(B)=2.064, p<0.01) and early joiners of improvements on the implementation of such policies (Exp(B)=2.236, p<0.01).

Models 76 and 77 focus on the existence of an anti-corruption policy and its implementation as the dependent variables, respectively. These models explain 76.1% and 71.7% of variance (Nagelkerke  $R^2$ ) respectively, correctly classifying 86.3% and 76.9% of cases. Sign up at all stages is positive and significant in both models; however, middle joiners have slightly higher odds of improving performance than other participants and non-participants (Exp(B)=2.152 and 1.54, p<0.01, respectively). Finally, model 78 focuses on donations by pre tax profit. This model explains only 1.9% of variance. Surprisingly late joiners are more likely to decrease donations (Beta=-63.609, p<0.05). Variables for early and middle joiners are not significant.

Table 48 below synthetises and summarises the findings on the models described above, using the same letters as table 40 above. It shows that in nearly every case participants that joined in any given period were likely to see improvements in performance.

Table 48: Summary of results for models 53 to 78

Models	Dependent variables	Early	Middle	Late	EARLY (Exp(B) or	MIDDLE (Exp(B) or	LATE (Exp(B) or
M53	SOCSCORE	P	P	P	Beta) 2.204	Beta) 4,771	Beta) 4.095
M54	ENVSCORE	P	P	P	1.293	3.21	3.658
M55	CGVSCORE	P P	P	P	5.348	4.382	3.692
M56	Human Rights policies in house	P P	P	P	3.284	3.837	2.583
	Human Rights processes in house						
M57		P P	P	P P	2.946	2.913	2.335
M58	Human Rights policies supply chain	•	P		2.968	3.842	2.598
M59	Human Rights processes supply chain	P	P	P	2.988	2.942	2.311
M60	Freedom association policy	Р	Р	Р	2.296	2.928	2.562
M61	Freedom association processes	Р	Р	Р	3.544	3.254	3.345
M62	Trade union representation						
M63	Forced labour policies	Р	Р	Р	2.323	3.149	2.69
M64	Forced labour processes	Р	Р	Р	2.38	2.239	1.946
M65	Child labour policies	Р	Р	Р	2.483	3.226	2.697
M66	Child labour processes	Р	Р	Р	2.19	2.095	1.763
M67	Diversity policies	Р	Р	Р	2.292	3.157	1.588
M68	Diversity processes	Р	Р	Р	1.64	1.814	1.534
M69	Percentage of women managers						
M70	Emission reduction policy	Р	Р	Р	2.69	3.009	2.102
M71	Resource reduction policy	Р	Р	Р	3.552	4.017	2.11
M72	Environmental management	Р	Р	Р	2.224	2.388	1.89
M73	Environmental expenditures by pre-tax profit						
M74	Product innovation policy	Р	Р	Р	2.042	2.064	1.664
M75	Product innovation processes	Р	Р	Р	2.236	1.974	1.878
M76	Anti-corruption policy	Р	Р	Р	1.85	2.152	1.563
M77	Anti-corruption processes	Р	Р	Р	1.53	1.54	1.271
M78	Total donations by pre-tax profit			N			-63.609

Table 49 below summarises the number of times and percentage of total number of models in which each of the three independent variables (early, middle and late joiners) was significant (positive or negative) in total and then for each issue area. For example, being an early joiner had a positive and significant impact in performance in 84.6% of variables, or in 22 out of 26 models.

Table 49: Speed of adoption vs. performance – overall and per issue area

		All models				Labour	Environment	Anti-corruption
Variable	Total positive and significant	Percentage of positive and significant	Total negative and significant	Percentage of negative and significant	Percentage of positive and significant			
Early	22	84.6%	0	0.0%	100.0%	80.0%	83.3%	100.0%
Middle	22	84.6%	0	0.0%	100.0%	80.0%	83.3%	100.0%
Late	22	84.6%	1	3.8%	100.0%	80.0%	83.3%	100.0%

Table 50: Summary of impact of speed of adoption on policies, process of implementation and outcomes

	Early		Mic	ldle	Late	
Models	Percentage of positive and significant	Percentage of negative and significant	Percentage of positive and significant	Percentage of negative and significant	Percentage of positive and significant	Percentage of negative and significant
Dependent variables covering the existence of policies	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
Dependent variables covering the existence of process of implementation	100.0%	0.0%	100.0%	0.0%	100.0%	0.0%
Dependent variables covering outcomes	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%

Models 79 to 83: further understanding the impact on concrete outcomes

Given the somewhat erratic impact of sign up on actual outcomes, new models were run with five new dependent variables. The results did not show more consistency – impact on outcomes remains varied as the models show.

Table 51: Regression table for models 79 to 83

	M79	M80	M81	M82	M83
Models	Total injury rate	Waste recycling ratio	CO2 equivalent emissions total	Energy use total	Board gender diversity
Constant	2.324 (1.224) *	6.215 (3.823)	1284237.365 (1735888.464)	-20271481.99 (60802570.29)	-3.065 (0.549) ***
Firm Size	-0.009 (0.066)	-0.125 (0.192)	192876.097 (89675.431) **	8337109.586 (3267891.516) **	0.153 (0.025) ***
ROTA	0.001 (0.011)	0.027 (0.031)	9344.124 (16681.297)	-78109.096 (595208.707)	0.003 (0.004)
Extractive Industry	-0.681 (0.253) ***	-4.306 (1.591) ***	751796.138 (528824.275)	65033487.13 (19189635.87) ***	-0.473 (0.173) ***
Business regulation	-0.269 (0.186)	0.408 (0.528)	-238343.757 (262340.108)	2281218.87 (9088535.189)	0.179 (0.082) **
Regulatory quality	0.613 (0.341) *	-1.731 (1.128)	-524626.62 (499655.885)	-27772867.13 (16436182.33) *	0.101 (0.153)
LAG Dependent Variable	0.891 (0.007) ***	0.877 (0.012) ***	0.928 (0.006) ***	0.588 (0.014) ***	0.827 (0.005) ***
LAG peer performance in industry	-0.125 (0.007) ***	0.045 (0.022) **	-0.021 (0.008) ***	-0.119 (0.035) ***	0.078 (0.016) ***
LAG Peer performance in country	-0.005 (0.006)	0.02 (0.023)	-0.008 (0.006)	-0.159 (0.048) ***	0.196 (0.009) ***
UNGC participant in current year	0.567 (0.2) ***	-0.379 (0.55)	-385332.542 (281277.584)	-12227303.11 (9691529.739)	0.428 (0.114) ***
	1005	4004		22.12	4.4000
N D Square	1605 0.99	1684 0.858	5008 0.841	3648 0.359	14868 0.778
R Square Adjusted R Square	0.99	0.858	0.841	0.359	0.778

Model 79 (R<sup>2</sup>=0.99) has total injury rates as the dependent variable. Results suggest that participants are more likely to see an increase in injury rate (Beta=0.567, p<0.01)

than non-participants. Model 80 ( $R^2$ =0.858) focused on waste recycling ratio, model 81 ( $R^2$ =0.841) on CO2 equivalent total emissions, model 82 ( $R^2$ =0.359) on total energy use. In none of these sign up was significant. Finally, model 83 ( $R^2$ =0.778) focused on gender diversity at board level. It suggests that participants have seen better improvements in board diversity than non-participants (Beta=0.428, p<0.01). Table 49 below summarises the results, showing that participants were more likely to see improvements in board diversity but also to have higher injury rates amongst workers.

Table 52: Summary of results for models 79 to 83

Models	Dependent Variable	UNGC participant in current year
M79	Total injury rate	Р
M80	Waste recycling ratio	
M81	CO2 equivalent emissions total	
M82	Energy use total	
M83	Board gender diversity	Р

Table 53: Summary of results - Sign up and outcomes

Independent variable	Total positive and significant	Percentage of positive and significant	Total negative and significant	Percentage of negative and significant	Total number of models
UNGC participant in current year	2	40.0%	0	0.0%	5

# 8.5 Discussing the hypotheses

It is important to highlight here that this study is dealing with a wide variety of performance variables, as well as different variables for sign up, resulting in a large number of models. The implication of this is that a straight test of a hypothesis is challenging as given the variety and number of models, some different results are bound to emerge in some case. This section therefore seeks to summarise as accurately as possible what the data says, taking this challenge into consideration.

Table 54: Discussing hypotheses

Hypotheses	Status
Hypothesis 1: Early adopters of the UNGC are more likely to display higher performance improvements – i.e. substantive commitment to the initiative - than late adopters.	Partially supported
Hypothesis 2: Firms that join the UNGC are more likely to display higher corporate social performance in all issue areas of the UNGC than firms that do not join.	Partially supported
Hypothesis 3: Firms that join the UNGC are more likely to display higher corporate social performance in selected issue areas of the initiative than firms that do not join.	Not supported

Hypothesis 4: Firms that join the UNGC are not more likely to display higher
corporate social performance in the initiative's issue areas than firms that do
not join.

Not supported

Hypothesis 1 is partially supported. The variables for early and late adoption are concomitantly positive and significant in 22 out of the 26 models (84.6%), suggesting that both are displaying improvements in performance that are higher than non-participants. However, in 17 cases out of these 22 (77.3%) the coefficient (Exp(B) or Beta) for early adopters is higher than for late adopters, suggesting a slightly higher improvement for early than late adopters.

Hypothesis 2 is partially supported and 3 is not supported, as joining the UNGC had a positive and significant impact in improved performance in 88.5% of the models, or for 23 of the 26 dependent variables. Looking at particular issues, being a participant had a positive and significant impact on 100% of the human rights variables, 90% of the labour variables, 83.3% of the environmental variables and 100% of the anticorruption variables. Therefore, while joining has a slightly higher impact on human rights and anti-corruption performance, it is still positive and significant for the vast majority of the environmental and labour performance variables.

Hypothesis 4 is not supported as in 88.5% of the models, or for 23 of the 26 dependent variables, being a participant had a positive and significant impact on improvement in performance. However, it cannot be totally dismissed as in one case sign up was negatively and significantly associated with performance – for total donations by pre tax profit. Similarly, for one of the extra outcomes variables – injury rates – participants were also found to perform poorer.

### 8.6 Discussion and Conclusion

This chapter aimed at understanding whether joining the UNGC is associated with higher corporate social performance, and more specifically whether it was associated with higher performance in the UNGC issue areas. When firms make the voluntary decision to join the UNGC, firms commit to abide to the initiative's 10 principles on human rights, labour, environment and anti-corruption. One would expect that if a firm displays substantive commitment to the initiative, engages with the UNGC and works to incorporate these principles into its operations, one would be able to observe an improvement in performance over time.

The empirical evidence suggests that joining the UNGC is indeed associated with higher performance in the UNGC issue areas. In 88.5% of the models (i.e. for 23 of the 26 dependent variables) participation in the initiative was positively associated with improvements in performance. This was true for all models showing improvements in policies, as well as all models focusing on the implementation of these policies, suggesting that UNGC participants experienced greater improvements in establishing policies and in setting up management structures to deliver on the commitments made on these policies, when compared to non-participants.

The impact of sign up on outcomes, however, was more erratic. Evidence suggests that participants are more likely than non-participants to have a more unionised work force and also to have women on its board. However, sign up did not have a significant impact on percentage of female managers, environment expenditure by pre-tax profit, waste recycling ratio, total energy use, and total CO2 equivalent emissions. More of concern, participants were less likely to see improvements on level of donation by pre-tax profit and were more likely to experience an increase on total injure rates amongst its workforce.

This may suggest a stages process, by which firms have made strides in communicating their commitments to the UNGC and setting up internal structures to deliver on them; however, participants still need to do more to deliver on concrete outcomes. The latter may be a result of different issues – it may be a lack of capacity, i.e. firms are still learning how to effectively make their policies and systems work and translate into outcomes; it may be intentional decoupling, although it begs the question of why implement management systems if one is not willing to deliver on outcomes; or it may also be a matter of more nuanced decoupling in which firms choose level of compliance in a continuum, given that for some outcomes sign up had a positive impact.

The impact of joining on improvements in performance is fairly even across the four issue areas, even though it is slightly stronger in human rights and anti-corruption. This may suggest that firms see their commitment to the initiative as a whole, rather than focusing on a specific issue. While issue materiality varies across industries and institutional environments, the UNGC seems to have achieved a good balance; the initiative seems to have a good coverage of issues that still make sense – or are material enough - for a wide variety of industries and firms based on very diverse contexts.

Finally, evidence suggests that joiners at all points in time experience improvements in performance. Even though a more detailed analysis indicates that early joiners are slightly more likely than late joiners to improve in most performance variables, one cannot affirm that the latter are more inclined to decouple as both early and late joiners are showing improvements. While this does not support the theoretical argument that early joiners will display substantial commitment due to their interest in improving performance and late joiners will display ceremonial commitment as they see sign up only as a means to protect legitimacy in a context of high levels of adoption, it is in line with findings in chapter six, in which this two-stages model did not fit the UNGC diffusion pattern.

In a nutshell, despite criticisms in regards to the UNGC's "lack of teeth" and concerns that firms may join and not make any changes to their behaviour, there is strong evidence to suggest that participants are improving performance more than non-participants in a number of performance measures covering the UNGC principles. Even though more attention needs to be dedicated to the delivery of outcomes, results suggest that the UNGC is making important strides in promoting a more sustainable and inclusive global economy.

# 8.7 Contribution to practice and to theory

This study makes an important contribution to theory by using a multi-issue measure of performance, longitudinally covering all UNGC principles in the aspects of policies, processes of implementation and whenever feasible outcomes. To the author's best knowledge no other study on the UNGC offered the same breadth of variables to measure participant's performance in the initiative.

The strong empirical evidence that participants are in most cases likely to outperform non-participants is valuable information for practitioners working with voluntary CSR initiatives. This offers support to the importance of such initiatives in helping establish higher corporate social performance globally, and the UNGC's importance in particular. The fact, however, that the evidence in regards to outcomes is more erratic, is also valuable information for the UNGC, suggesting that participants may be in need of extra support (or extra pressure for improvement of performance) in how to deliver concrete outcomes on the commitments made.

### 8.8 Limitations and future research

As highlighted in chapter six, the choice of dependent variables is at the same time a strength of this study, as they cover all UNGC principles and therefore make an important contribution to the literature, but also a limitation, in the sense that the choice of variables is constrained by their availability and by a certain degree of discretion, in the absence of a widely agreed set of variables to measure CSP in general and performance in the UNGC in particular. It would be interesting for future studies to run further tests with a different set of performance variables, covering the same issues and principles, to compare results. This would be notably interesting for variables representing outcomes other than policies.

# 8.9 Summary and next chapter

This chapter aimed at understanding whether joining the UNGC was associated with higher performance in the UNGC issue areas. The empirical evidence indicates that participants – comparing to non-participants – experienced greater improvements in establishing policies and in setting up management structures to deliver on the commitments made on these policies. The evidence on concrete outcomes is, however, more erratic – not in every case was sign up associated with greater improvements. This may suggest that a stages process is at play, with participants having made greater strides on communicating commitments and implementing the structures to deliver on them, but still needing to improve actual deliver of outcomes.

Interestingly and contrary to theory, participants at every stage – and not only early joiners - have experienced improvements in performance in the period studied. Finally, it is important to highlight that the impact of joining on improvements in performance is fairly even across the four issue areas, even though it is slightly stronger in human rights and anti-corruption. This suggests that the UNGC seems to have indeed chosen a set of issues that are material enough for a wide variety of industries and firms based on very diverse contexts.

The next chapter builds on the whole thesis. It will summarise and discuss the main findings as well as the key contributions this thesis makes to scholars and to practitioners.

## 9 Conclusion

This chapter will summarise and discuss the main findings of this thesis, as well as key contributions to the academic literature and to practitioners, limitations and future research. This thesis aimed at contributing to increase the understanding on why firms join and how they perform in the largest CSR initiative in the world – the UNGC. Using institutional theory, it aimed at understanding the extent to which institutional pressures at national, industry and firm level may influence sign up and performance, as well as the extent to which the UNGC itself, as a institutional pressure at a global level, may influence performance in the initiative's principles.

It was clear from the literature review that, while valuable knowledge has been shared on institutional influences on corporate engagement in voluntary CSR initiatives in general and the UNGC in particular, some gaps remained in regards to sign up and performance in the latter. The UNGC being the largest CSR initiative in the world, it is watched closely by supporters and critics of this model of decentralised institutions through voluntary CSR initiatives. Arguably its success or failure may have an impact on this model as a whole. Therefore, further knowledge on aspects that make the initiative more or less effective in attracting firms and getting them to abide to the commitments made, is very valuable for both academics and practitioners.

## 9.1 Summary and discussion of key findings

The four empirical studies yielded important findings that make for relevant information for both academic and practitioners. There is strong evidence that institutional forces at all levels are at play, influencing firms' decision to join and performance in the UNGC principles. Key findings on the empirical studies are presented below.

#### 9.1.1 On drivers for joining

While there is strong empirical evidence that institutional pressures at firm, industry and national levels play a role in influencing firms' decision to join, not all pillars had the same level of influence over firms' decision.

1. The influence of coercive pressures at national level was patchy. Coercive pressures associated with economic incentives, on the other hand, were positive and significant throughout. Firms engaged in trade relations with

- Europe and headquartered elsewhere had increased odds of joining the initiative.
- 2. Surprisingly, normative forces were in most cases not relevant in driving sign up, and where significant they had a negative impact in firms' likelihood of joining. It may be that higher participation of critical voices in the UNGC at a local level may discourage some firms to engage due to fear of exposing their weaknesses or engaging in a closer dialogue when they might not be fully prepared for it for example if they are still at a learner level in the UNGC or inclined to ceremonial engagement.
- 3. Mimetic forces were found to have a key role in influencing firms' decision to join. Peer participation both within the firm's home country and industry had a significant impact in increasing the odds of a firm joining the UNGC.
- 4. While the role of good CSP in firms' decision to join the UNGC has been largely unexplored in the literature, there is strong empirical evidence that higher performers will be more likely to join the UNGC. It is proposed that higher performers may be able to accrue legitimacy benefits of participation quicker and at a lower investment, for they are likely to be already implementing several actions in support of UNGC principles.
- 5. Larger firms are more prone to join, as well as those in the extractive industry. Slack resources and advertisement intensity, on the other hand, are not relevant.
- 6. Developed and developing countries had slightly different paths for joining.

## 9.1.2 On speed of adoption

While valuable information was shared in chapter four about drivers for firms' decision to join the UNGC, chapter five showed that factors moderating firms' decision to join the initiative vary along the different phases of implementation of the UNGC. The two-stage model (Tolbert and Zucker, 1983) proposes that early joiners will be interested in improving performance (DiMaggio and Powell, 1983) or fulfilling a specific need or interest (Scott, 2008), while later joiners will be more concerned with ensuring legitimacy as practice becomes institutionalised. This model cannot be confirmed in this study; if anything, empirical results point to the opposite direction, with early joiners concerned with legitimacy (due for example, to larger size, or belonging to the extractive industry) and late joiners with a stronger instrumental focus (for example, trade relations with Europe). While different from expected, this is

in line with Arevalo et al's (2013) findings for the adoption of the UNGC in the Spanish context.

Some other highlights of this empirical chapter are:

- 1. Empirical evidence shows that early joiners in the UNGC are bigger firms, with a good corporate social performance story to tell and with higher legitimacy threats due to being from an extractive industry. Early joiners are also highly susceptible to mimetic forces in the form of peer participation. Late joiners, on the other hand, show concern with the economic benefits of joining. Size and inherent impact are no longer significant for those firms, but a good story to tell in all areas of corporate social performance is driving late adoption. Peer participation remains an important mimetic pressure. Also, late joiners are firms from countries with more stringent labour legislation and less democratic governments, where local NGO participation in the UNGC discourages sign up to the initiative.
- 2. Different from expected increasing levels of sign up of peers in the UNGC within the firms' industry and country has an important impact on early joining, more so than in later periods. While this goes against theory, it may be that in early periods uncertainty in relation to benefits and risks of participation is at its peak and therefore for every new peer that joins, a little of this uncertainty fades away, and a firm is therefore more likely to join. It may also be that the initial group of participants (bigger firms, with higher levels of social performance) are actually a "small club" at a global level. Therefore, an increase in levels of participation amongst those firms will tend to have a greater impact in the decision of other firms in this small circle to join (if compared to peer pressure amongst a much larger group nationally or globally).
- 3. Evidence suggests that while a higher number of GRI participants in a country was associated with higher odds of joining the UNGC in the late period, this actually reduced the odds of firms joining in the early period. It may be that in the early days of the UNGC the synergies between these initiatives were not yet clear potentially leading to a perception that the two initiatives were exclusionary; it may also be that professionals implementing GRI might have seen some level of competition in the UNGC in the early days. As synergies became clearer with time, this competitive element might have dissipated in light of complementarities.

#### 9.1.3 On drivers for performance amongst participants

This empirical chapter showed evidence that institutional pressures at different levels can influence participating firms' performance in the UNGC principles. While they are subject to the same overall commitment (being a participant) and the pressures associated with it, different factors moderate this relationship. This chapter looked separately at development of policies, establishment of processes to implement on them and on outcomes of these efforts. Some highlights are:

- 1. Improvements in performance in regards to the existence of policies are largely driven by "who I am", notable in terms of size and previous performance. It could be argued that larger firms with a good CSP story to tell are under greater scrutiny from stakeholders, and failing to keep a promise may come at a high cost for them. Nevertheless, what peers within industry are doing is also an important driver in most cases, as well as a national environment with a more stringent business regulation.
- 2. Improvements in regards to the implementation of policies, on the other hand, have a slightly bigger influence from the national environment when compared to policies, with both more stringent business regulation and higher regulatory quality as significant for most performance variables. It may be that implementation requires a higher level of commitment to the promises made than policies "easier said than done" as the adage goes. Therefore, in a mirror effect, a stronger set of institutions at national level where I come from may increase the costs of failing to keep a promise, therefore leading to higher levels of implementation of these promises.
- 3. Peers' performance, notably at industry level, has an important role in defining participants' performance in regards to policies, implementation and outcomes.

#### 9.1.4 On sign up and performance

Despite criticisms in regards to the UNGC's "lack of teeth" and concerns that firms may join and not make any changes to their behaviour, there is strong evidence to suggest that participants are improving performance more than non-participants in a number of performance measures covering the UNGC principles. Even though more attention needs to be dedicated to the delivery of outcomes, there is strong evidence that sign up to the UNGC has an important impact on improvement on a number of variables measuring performance in the ten principles. Some important findings are:

- 1. Empirical evidence suggests that joining the UNGC is indeed associated with higher performance in the UNGC issue areas. In 88.5% of the models (i.e. for 23 of the 26 dependent variables) joining the initiative was positively associated with improvements in performance. This was true for all models showing improvements in the establishment of policies and in setting up management structures to deliver on the commitments made on these policies.
- 2. The impact of sign up on the outcome variables, however, was more erratic. This may suggest a stages process, by which firms have made strides in communicating their commitments to the UNGC and setting up internal structures to deliver on them; however, participants still need to do more to deliver on concrete outcomes. This may be due to a lack of capacity; it may be intentional decoupling, although it begs the question of why implement management systems if one is not willing to deliver on outcomes; or it may also be a matter of more nuanced decoupling in which firms choose level of compliance in a continuum, given that for some outcomes sign up had a positive impact.
- 3. The impact of time of participation in performance was assessed in chapters six and seven, using different samples, modelling strategies and with different focus. Despite the differences in the studies, the results are similar. In chapter six, time of participation was significant for eight out of 26 models, in other words, in the majority of cases the length of participation was not significantly influencing the outcome. In chapter seven, what can be observed is that in all but one case, the variables representing early, middle and late are significant in exactly the same variables, i.e. early joiners are not overall more likely to improve performance than late joiners, as theory would predict. As discussed before, even though a more detailed analysis indicates that early joiners are slightly more likely than late joiners to improve in most performance variables, both early and late joiners are showing improvements. As a result, in both studies, one cannot confirm that overall those that have been participants for a longer period of time display greater improvements in performance.

#### 9.2 Contributions to the academic literature

A key contribution to the literature is the use of a broader measure of performance on the UNGC, one that encompasses all UNGC principles and builds on sound theoretical base, longitudinally covering all UNGC principles in the aspects of policies, processes of implementation and whenever feasible outcomes. Previous research on UNGC performance focused on single-issue indicators (Bernhagen and Mitchell, 2010), on self-reported levels of implementation (learner, active, advanced, among others) (Schembera, 2012), on different angles about reporting (Chen and Bouvain, 2009, Hamann et al., 2009) or on measures of COP submission and delisting (Knudsen, 2011, Perez-Batres et al., 2010). To the author's best knowledge this is the first study with such a broad measure of performance in the UNGC, which is arguably an important step in understanding the actual impact of the initiative.

This thesis also sheds important knowledge on drivers for speed of adoption on the UNGC. Most research on speed of adoption of new practices focuses on innovation. Where it looks into voluntary CSR initiatives, it mostly focuses on the diffusion of ISO14001 (Delmas and Montes-Sancho, 2011, Delmas and Toffel, 2008). This study contributes to the literature by providing an empirical verification of drivers for adoption at different stages of a voluntary CSR initiative that is non-certifiable – the UNGC. To the author's best knowledge, there was only one study on the UNGC that looked into speed of adoption (Arevalo et al., 2013). The study, however, was restricted to the Spanish context, and focused mainly on the interplay between motivations for joining the UNGC and speed of adoption. This study therefore offers not only a cross-national assessment of drivers for joining, but also an assessment of intuitional drivers at multiple levels.

Finally, this study makes an important contribution to theory by empirically testing the role of CSP as a driver for firms' decision to join the UNGC, as well as the role of mimetic pressures notably within peers in the same industry. While this discussion is incipient in the literature on the UNGC, empirical evidence confirmed the relevance of these elements in firms' sign up to the UNGC and performance in the initiative.

# 9.3 Contributions to practitioners

This thesis makes an important contribution for practitioners. It shares valuable evidence on the profile and drivers for firms to join and perform in the UNGC that can be useful for those trying to engage firms in this or similar initiatives. For one thing, evidence that higher CSP performers will be more likely to join the UNGC is relevant as practitioners can arguably work with those firms in order to gather enough support to attract more firms to the initiative. Following from that, empirical evidence of the important impact of peer participation in firms' decision to join the initiative is also valuable information. It suggests that the establishment of partnerships with industry organisations, for example, can be a good tool to increase sign up. Initiatives at the country level such as the UNGC local networks are an equally important tool, as

those networks may offer a good space for local participants to be seen and a good display of local participation for firms that have not decided to join yet.

As for initiatives in different stages of development, results are relevant in that by targeting the right participants in the early days, voluntary CSR initiatives are in a better position to grow their base of participants as time progresses. Empirical evidence of the important impact of peer sign up in firms' decision to join the initiative especially in the early days suggests that the establishment of partnerships with industry organisations, for example, or initiatives at the country level such as the UNGC local networks, can be valuable strategies to help a new initiative to take off. In later periods, however, the relevance of economic benefits in driving the decision to join shows that strategies such as working with champions can be very valuable to ensure continuous growth. For example, by incentivising larger firms that are well involved in the initiative to promote the UNGC across its supply chain may bring a number of new participants to the initiative.

For practitioners aiming to improve performance, empirical evidence of the strong mimicking behaviour element, seen through the important impact of peer performance in participants' performance, notably at industry level, makes for relevant information. This highlights the relevance of strategies of profiling "champions" of the UNGC, as well as the sharing of good practices in different spaces (meetings, websites, publications, for example), as these are likely to push more participants into mimicking their way into better performance.

Finally, strong empirical evidence that UNGC participants are in most cases likely to outperform non-participants is valuable information for practitioners. This offers support to the importance of such initiatives in helping establish higher corporate social performance globally, and the UNGC's importance in particular. The fact, however, that the evidence in regards to outcomes is more erratic, is also valuable information for the UNGC, suggesting that participants may be in need of extra support (or extra pressure for improvement of performance) on how to deliver concrete outcomes on the commitments made.

#### 9.4 Limitations and future research

The choice of dependent variables is at the same time a strength of this study, as it offers a wider set of issues and covers all UNGC principles and therefore makes an important contribution to the literature, but also a limitation, in the sense that the choice of variables is constrained by their availability. The ASSET4 data starts in

2002. While these are the early days of the UNGC, it would have been useful to have data going back to the year the initiative was launched and the first firms joined, or even before. In addition, a number of outcome variables, especially variables covering controversies (as a proxy for bad and externally recognised outcome) and awards (as a proxy for good and externally recognised outcome) were not consistently available and as a result could not be used.

It is also important to highlight that while every effort was made to choose dependent variables that were aligned with the UNGC principles and with a solid theoretical ground, there is not a one widely agreed set of variables to measure CSP in general and performance in the UNGC in particular. Therefore, choice is not only guided by data availability, as explained above, but also, to some extent, by a certain degree of discretion from the author. It would be interesting for future studies to run further tests with a different set of performance variables, covering the same issues and principles, to compare results. This would be notably interesting for variables representing outcomes other than policies, as these were particularly difficult to use for not being widely available. Finally, ASSET4's universe covers large listed firms, which does not represent the full spectrum of UNGC participants. Therefore, it would be interesting to develop a similar study using a sample of small firms, for example.

# 9.5 Concluding remarks

This thesis aimed at contributing to increase the understanding on why firms engage and how they perform in the largest CSR initiative in the world – the UNGC. Using institutional theory, it aimed at understanding the extent to which institutional pressures at national, industry and firm level may influence sign up and performance, as well as the extent to which the UNGC itself, as an institutional pressure at global level, may influence performance in the initiative's principles.

The empirical studies showed strong evidence that institutional forces at all levels are at play, influencing firms' decision to join and performance in the UNGC principles. For one thing, mimetic forces were very important in driving both firms' decision to join the UNGC and their performance. Being under greater stakeholder scrutiny due to large size or belonging to an extractive industry was also an important driver for joining the UNGC, arguably in views of protecting legitimacy seen to be at threat.

Finally, looking into the UNGC as a source of institutional pressure as well, despite criticisms in regards to the UNGC's "lack of teeth", there is strong evidence to suggest that participants are improving performance more than non-participants in

the UNGC principles. Even though more attention needs to be dedicated to the delivery of outcomes, there is strong evidence that the UNGC is making important strides in its aim of promoting a more sustainable and inclusive global economy.

# 10 Annex: Regression tables for models 18 to 32 in chapter five

This section will provide the regression tables for models 18 to 32, in chapter five. A discussion on the results is provided under chapter five.

Table 55: Regression table for dependent variable early vs. otherwise

Dependent variable: Early Vs Otherwise (2000-2003)	M18	M21	M24	M27	M30
Constant	-1.205 (0.836)	-12.205 (1.802) ***	-3.93 (1.029) ***	-1.244 (0.818)	-12.575 (1.978) ***
ROTA	-0.001 (0.007)	0.015 (0.01)	0.009 (0.007)	-0.002 (0.007)	0.016 (0.01)
Leverage	0.005	-0.001	-0.003	0.005	-0.002
Leverage	(0.004)	(0.007)	(0.005)	(0.004)	(0.007)
Advertising intensity	0 (0.003)	0.027 (0.033)	-0.001 (0.01)	(0.003)	0.016 (0.036)
Credit market regulation	0.072 (0.082)	0.26 (0.105) **	-0.007 (0.097)	-0.065 (0.089)	-0.103 (0.127)
Labour market regulation	-0.486 (0.059) ***	-0.172 (0.089) *	0.07 (0.085)	-0.352 (0.073) ***	0.245 (0.115) **
Business regulation	-0.192 (0.134)	-0.479 (0.195) **	-0.614 (0.179) ***	-0.119 (0.134)	-0.361 (0.254)
Polity IV	0.22 (0.07) ***	-0.013 (0.066)	0.076 (0.048)	0.237 (0.068) ***	0.113 (0.078)
Government support to human rights		1.47 (0.584) **			0.645 (0.658)
Government support to labour		0.91 (0.294) ***			-1.004 (0.546) *
Government support to environment		1.035 (1.228)			-0.502 (1.414)
Government support to anti-Corruption		0.07			0.125
- Government support to anti-corruption		(0.259)			(0.278)
Local NGOs		0.013 (0.007) *			0.014 (0.008) *
Firm size		0.459 (0.075) ***			0.435 (0.08) ***
SOCSCORE		0.024 (0.009) ***			0.025 (0.009) ***
ENVSCORE		0.018 (0.008) **			0.014 (0.009)
CGVSCORE		0.012 (0.005) **			0.01 (0.005) *
Extractive industry		0.405 (0.405)			0.971 (0.427) **
·		0.225			-0.028
ISO14001 certified		(0.25)	5.774		(0.264) 5.006
UNGC participants in home country			(0.566)		(0.728) ***
UNGC participants in the industry			6.967 (1.116) ***		5.587 (1.357) ***
			0.013 (0.004)		0.014 (0.006)
Regional UNGC participation			***	0.330	` **
Trade with the EU				0.238 (0.189)	0.199 (0.255)
GRI participation in home country				-0.007 (0.002) ***	-0.015 (0.004) ***
N	4149	3309	4149	4149	3309
Nagelkerke R Square	0.105	0.389	0.305	0.113	0.454
Percentage correct cases  Difference in Nagelkerke R Square	0	15.6	8	0	25.6
relative to Model 1		0.284	0.200	0.008	0.349

Table 56: Regression table for dependent variable middle vs. otherwise

Dependent variable: Middle Vs Otherwise (2004-2007)	M19	M22	M25	M28	M31
Constant	1.165 (0.665) *	-6.666 (1.429) ***	-0.903 (0.757)	1.21 (0.666) *	-7.332 (1.482) ***
ROTA	-0.012 (0.006) **	-0.019 (0.009) **	-0.011 (0.007)	-0.013 (0.006) **	-0.016 (0.009) *
Leverage	0.005 (0.004)	0.006 (0.006)	0.002 (0.004)	0.006 (0.004)	0.004 (0.006)
Advertising intensity	0 (0.002)	0.046 (0.03)	(0.003)	(0.002)	0.039 (0.03)
Credit market regulation	-0.002 (0.075)	0.076 (0.105)	0.002 (0.079)	-0.013 (0.089)	0.003 (0.115)
Labour market regulation	-0.387 (0.056) ***	-0.253 (0.08) ***	-0.139 (0.067) **	-0.399 (0.074) ***	-0.214 (0.104) **
Business regulation	-0.285 (0.115) **	-0.25 (0.174)	-0.426 (0.14) ***	-0.273 (0.118) **	-0.131 (0.198)
Polity IV	0.045 (0.024) *	-0.091 (0.038) **	0.001 (0.023)	0.047 (0.025) *	-0.103 (0.044) **
Government support to human rights		1.416 (0.471) ***			1.37 (0.539) **
Government support to labour		0.039 (0.259)			-0.17 (0.337)
Government support to environment		-1.043 (0.738)			-1.069 (0.839)
Government support to anti-Corruption		-0.247 (0.253)			-0.092 (0.283)
Local NGOs		0.013 (0.007)			0.005 (0.008)
Firm size		0.339 (0.068) ***			0.332 (0.07) ***
SOCSCORE		0.049 (0.008) ***			0.049 (0.008) ***
ENVSCORE		0.001 (0.006)			-0.002 (0.007)
CGVSCORE		0.004 (0.004)			0.004
Extractive industry		0.658 (0.345)			0.841 (0.355) **
ISO14001 certified		0.388 (0.23)			0.315 (0.235)
UNGC participants in home country			3.501 (0.535) ***		2.366 (0.751) ***
UNGC participants in the industry			4.24 (0.999) ***		2.043 (1.214) *
Regional UNGC participation			0.004 (0.003)		-0.003 (0.004)
Trade with the EU			, , , , ,	0.404 (0.177) **	0.104 (0.213)
GRI participation in home country				0 (0.002)	0.003 (0.004)
N	3987	3149	3987	3987	3149
Nagelkerke R Square	0.084	0.344	0.151	0.088	0.355
Percentage correct cases	0	8.4	0	0	11.8
Difference in Nagelkerke R Square relative to Model 1		0.260	0.067	0.004	0.271
relative to Model 1		1	1	1	I

Table 57: Regression table for dependent variable late vs. otherwise

Dependent variable: Late Vs Otherwise (2008-2010)	M20	M23	M26	M29	M32
Constant	-0.7 (0.688)	-6.38 (1.4) ***	-3.181 (0.777) ***	-0.553 (0.681)	-7.62 (1.488) ***
ROTA	-0.004 (0.006)	-0.007 (0.01)	-0.002 (0.007)	-0.004 (0.006)	-0.004 (0.011)
Leverage	0.000)	-0.002	-0.003	0.000)	-0.003
Leverage	(0.004)	(0.005)	(0.004)	(0.004)	(0.005)
Advertising intensity	-0.001 (0.004)	-0.016 (0.036)	-0.006 (0.032)	-0.001 (0.004)	-0.035 (0.038)
Credit market regulation	0.124 (0.067)	0.195 (0.1)	0.127 (0.072)	0.049 (0.082)	0.081 (0.121)
Labour market regulation	-0.343 (0.05) ***	-0.235 (0.072) ***	-0.117 (0.059) **	-0.301 (0.063) ***	-0.311 (0.096) ***
Business regulation	-0.156 (0.116)	-0.174 (0.175)	-0.222 (0.137)	-0.126 (0.117)	0.047 (0.199)
Polity IV	0.055 (0.023) **	-0.046 (0.031)	0.022 (0.022)	0.066 (0.023) ***	-0.079 (0.04) **
Government support to human rights		0.737 (0.385) *			0.764 (0.473)
Government support to labour	_	0.372 (0.234)			0.408 (0.321)
Government support to environment		0.249 (0.681)			0.764 (0.791)
Government support to anti-Corruption		-0.024			0.29
dovernment support to unit corruption		(0.234)			(0.283)
Local NGOs		-0.001 (0.008)			(0.009)
Firm size		0.119 (0.06) **			0.086 (0.064)
SOCSCORE		0.032 (0.006) ***			0.032 (0.006) ***
ENVSCORE		0.017 (0.006) ***			0.016 (0.006) ***
CGVSCORE		0.006 (0.004)			0.01 (0.004) **
Extractive industry		-0.286 (0.385)			-0.098 (0.408)
ISO14001 certified		0.073 (0.196)			-0.115 (0.205)
UNGC participants in home country		(01100)	3.681 (0.505) ***		3.566 (0.728) ***
UNGC participants in the industry			5.115 (0.909) ***		4.25 (1.169) ***
Regional UNGC participation			0.003 (0.002)		-0.009 (0.004) ***
Trade with the EU				0.539 (0.157) ***	0.507 (0.191) ***
GRI participation in home country				-0.003 (0.002) *	0.009 (0.004) **
N	3805	2971	3805	3805	2971
Nagelkerke R Square Percentage correct cases	0.066	0.304 3.4	0.143	0.074	0.345
Difference in Nagelkerke R Square	U			_	11.8
relative to Model 1		0.238	0.077	0.008	0.279

## 11 References

- AGUILERA, R. V. 2007. Translating theoretical logics across borders: organizational characteristics, structural mechanisms and contextual factors in international alliances. *Journal of International Business Studies*, 38, 38-46.
- ALAS, R. 2006. Ethics in countries with different cultural dimensions. *Journal of Business Ethics*, 69, 237-247.
- ALBINGER, H. S. & FREEMAN, S. J. 2000. Corporate social performance and attractiveness as an employer to different job seeking populations. *Journal of Business Ethics*, 28, 243-253.
- ALBUQUERQUE, P., BRONNENBERG, B. J. & CORBETT, C. J. 2007. A spatiotemporal analysis of the global diffusion of ISO 9000 and ISO 14000 certification. *Management science*, 53, 451-468.
- ALFORD, R. R. & FRIEDLAND, R. 1985. *Powers of theory: capitalism, the state, and democracy*, Cambridge University Press.
- AMATO, L. H. & AMATO, C. H. 2007. The effects of firm size and industry on corporate giving. *Journal of Business Ethics*, 72, 229-241.
- ANNANDALE, D., MORRISON-SAUNDERS, A. & BOUMA, G. 2004. The impact of voluntary environmental protection instruments on company environmental performance. *Business Strategy and the Environment*, 13, 1-12.
- ARAVIND, D. & CHRISTMANN, P. 2010. Decoupling of standard implementation from certification. *Business Ethics Quarterly*, 21, 73-102.
- AREVALO, J. A. 2010. Critical reflective organizations: an empirical observation of global active citizenship and green politics. *Journal of Business Ethics*, 96, 299-316.
- AREVALO, J. A., ARAVIND, D., AYUSO, S. & ROCA, M. 2013. The Global Compact: an analysis of the motivations of adoption in the Spanish context. *Business Ethics: A European Review*, 22, 1-15.
- 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, 170-182.
- ARTHAUD-DAY, M. L. 2005. Transnational corporate social responsibility: a tridimensional approach to international CSR research. *Business Ethics Quarterly*, 15, 1-22.
- ASHFORTH, B. & GIBBS, B. 1990. The double-edge of organizational legitimation. *Organization Science*, 1, 177-194.
- BAKER, M. 2010. Corporate accountability: blame the big names. *Ethical Corporation* [Online]. Available: <a href="http://www.ethicalcorp.com/communications-reporting/corporate-accountability-blame-big-names">http://www.ethicalcorp.com/communications-reporting/corporate-accountability-blame-big-names</a>. [Accessed 04 October 2013]
- BANSAL, P. & BOGNER, W. C. 2002. Deciding on ISO 14001: economics, institutions, and context. *Long Range Planning*, 35, 269-290.
- BANSAL, P. & HUNTER, T. 2003. Strategic explanations for the early adoption of ISO 14001. *Journal of Business Ethics*, 46, 289-299.
- BARKEMEYER, R. 2009. Beyond compliance below expectations? CSR in the context of international development. *Business Ethics-a European Review*, 18, 273-289.
- BARLA, P. 2007. ISO 14001 certification and environmental performance in Quebec's pulp and paper industry. *Journal of Environmental Economics and Management*, 53, 291-306.

- BATTILANA, J., LECA, B. & BOXENBAUM, E. 2009. How actors change institutions: towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3, 65-107.
- BAUMANN, D. & SCHERER, A. 2010. MNEs and the UN Global Compact: an empirical analysis of the organizational implementation of corporate citizenship. *IOU Working Paper Series Zurich*: University of Zurich.
- BEEKUN, R. I., STEDHAM, Y. & YAMAMURA, J. H. 2003. Business ethics in Brazil and the U.S.: a comparative investigation. *Journal of Business Ethics*, 42, 267-279.
- BEHNAM, M. & MACLEAN, T. L. 2011. Where is the accountability in international accountability standards?: a decoupling perspective. *Business Ethics Quarterly*, 21, 45-72.
- BELIVEAU, B., COTTRILL, M. & ONEILL, H. M. 1994. Predicting corporate social responsiveness a model draw from three perspectives. *Journal of Business Ethics*, 13, 731-738.
- BENNIE, L., BERNHAGEN, P. & MITCHELL, N. J. 2007. The logic of transnational action: the good corporation and the Global Compact. *Political Studies*, 55, 733-753.
- BERLINER, D. & PRAKASH, A. 2010. Good norm, weak program: cross-national diffusion of the United Nations Global Compact. *Annual meeting of The American Political Science Association*. Washington, DC.
- BERNHAGEN, P. & MITCHELL, N. J. 2010. The private provision of public goods: corporate commitments and the United Nations Global Compact. *International Studies Quarterly*, 54, 1175-1187.
- BERNHAGEN, P., MITCHELL, N. J. & THISSEN-SMITS, M. 2012. Corporate citizens and the UN Global Compact: explaining cross-national variations in turnout. *Business and Politics*, 15, 1-23.
- BERRONE, P., FOSFURI, A., GELABERT, L. & GOMEZ-MEJIA, L. R. 2013. Necessity as the mother of 'green inventions': institutional pressures and environmental innovations. *Strategic Management Journal*, 34, 891-909.
- BJÖRKMAN, I., FEY, C. & PARK, H. 2007. Institutional theory and MNC subsidiary HRM practices: evidence from a three-country study. *Journal of International Business Studies*, 38, 430-446.
- BLASCO, M. & ZOLNER, M. 2010. Corporate social responsibility in Mexico and France: exploring the role of normative institutions. *Business & Society*, 49, 216-251.
- BLODGETT, J. G., LU, L.-C., ROSE, G. M. & VITELL, S. J. 2001. Ethical sensitivity to stakeholder interests: a cross-cultural comparison. *Journal of the Academy of Marketing Science*, 29, 190-202.
- BLOWFIELD, M. 2005. Corporate social responsibility: reinventing the meaning of development? *International Affairs*, 81, 515-524.
- BOIRAL, O. 2007. Corporate greening through ISO 14001: a rational myth? *Organization Science*, 18, 127-146.
- BOIRAL, O. & HENRI, J.-F. 2012. Modelling the impact of ISO 14001 on environmental performance: a comparative approach. *Journal of Environmental Management*, 99, 84-97.
- BRAMMER, S. & MILLINGTON, A. 2004. The development of corporate charitable contributions in the UK: a stakeholder analysis. *Journal of Management Studies*, 41, 1411-1434.
- BRAMMER, S. & MILLINGTON, A. 2008. Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal*, 29, 1325-1343.
- BRAMMER, S. J., PAVELIN, S. & PORTER, L. A. 2006. Corporate social performance and geographical diversification. *Journal of Business Research*, 59, 1025-1034.

- BREMER, J. A. 2008. How global is the Global Compact? *Business Ethics-a European Review*, 17, 227-244.
- BROWN, H. S., DE JONG, M. & LESSIDRENSKA, T. 2009a. The rise of the Global Reporting Initiative: a case of institutional entrepreneurship. *Environmental Politics*, 18, 182-200.
- BROWN, H. S., DE JONG, M. & LEVY, D. L. 2009b. Building institutions based on information disclosure: lessons from GRI's sustainability reporting. *Journal of Cleaner Production*, 17, 571-580.
- BRYMAN, A. 2008. Social Research Methods, Oxford, Oxford University Press.
- BURNS, L. R. & WHOLEY, D. R. 1993. Adoption and abandonment of matrix management programs: effects of organizational characteristics and interorganizational networks. *Academy of management journal*, 36, 106-138.
- BYRD, L. S. 2009. Collaborative corporate social responsibility: a case study examination of the international public relations agency involvement in the United Nations Global Compact. *Corporate Communications: An International Journal*, 14, 303-319.
- CAMPBELL, J. L. 2007. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *The Academy of Management Review*, 32, 946-967.
- CARROLL, A. B. 1979. A three-dimensional conceptual model of corporate performance. *The Academy of Management Review,* 4, 497-505.
- CARROLL, A. B. 2000. A commentary and an overview of key questions on corporate social performance measurement. *Business & Society*, 39, 466.
- CASTKA, P. & BALZAROVA, M. A. 2008. ISO 26000 and supply chains—On the diffusion of the social responsibility standard. *International Journal of Production Economics*, 111, 274-286.
- CETINDAMAR, D. & HUSOY, K. 2007. Corporate social responsibility practices and environmentally responsible behavior: the case of the United Nations Global Compact. *Journal of Business Ethics*, 76, 163-176.
- CHEN, J. C., PATTEN, D. M. & ROBERTS, R. W. 2008a. Corporate charitable contributions: a corporate social performance or legitimacy strategy? *Journal of Business Ethics*, 82, 131-144.
- CHEN, S. & BOUVAIN, P. 2009. Is corporate responsibility converging? A comparison of corporate responsibility reporting in the USA, UK, Australia, and Germany. *Journal of Business Ethics*, 87, 299-317.
- CHEN, Y., YASAR, M. & REJESUS, R. M. 2008b. Factors influencing the incidence of bribery payouts by firms: a cross-country analysis. *Journal of Business Ethics*, 77, 231-244.
- CHIH, H. L., CHIH, H. H. & CHEN, T. Y. 2010. On the determinants of corporate social responsibility: international evidence on the financial industry. *Journal of Business Ethics*, 93, 115-135.
- CHRISTMANN, P. & TAYLOR, G. 2006. Firm self-regulation through international certifiable standards: determinants of symbolic versus substantive implementation. *Journal of International Business Studies*, 37, 863-878.
- CLARKSON, M. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review,* 20, 92-117.
- CLEMENS, B. W. & DOUGLAS, T. J. 2005. Understanding strategic responses to institutional pressures. *Journal of Business Research*, 58, 1205-1213.
- COFFEY, B. S. & FRYXELL, G. E. 1991. Institutional ownership of stock and dimensions of corporate social performance an empirical examination. *Journal of Business Ethics*, 10, 437-444.
- COFFEY, B. S. & WANG, J. 1998. Board diversity and managerial control as predictors of corporate social performance. *Journal of Business Ethics*, 17, 1595-1603.

- COHN, J. 1970. Is business meeting the challenge of urban affairs? *Harvard Business Review*, 48, 68-83.
- CORTELL, A. P. & DAVIS, J. W., JR. 1996. How do international institutions matter? The domestic impact of international rules and norms. *International Studies Quarterly*, 40, 451-478.
- COX, P., BRAMMER, S. & MILLINGTON, A. 2004. An empirical examination of institutional investor preferences for corporate social performance. *Journal of Business Ethics*, 52, 27-43.
- CRILLY, D., ZOLLO, M. & HANSEN, M. T. 2012. Faking it or muddling through? Understanding decoupling in response to stakeholder pressures. *Academy of Management Journal*, 55, 1429-1448.
- CROUCH, C. 2006. Modelling the firm in its market and organizational environment: methodologies for studying corporate social responsibility. *Organization Studies*, 27, 1533.
- DACIN, M. 1997. Isomorphism in context: the power and prescription of institutional norms. *Academy of Management Journal*, 40, 46-81.
- DAHLSRUD, A. 2008. How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15, 1.
- DANISH COMMERCE AND COMPANIES AGENCY 2010. Corporate social responsibility and reporting in Denmark: impact of the legal requirement for reporting on CSR in the Danish Financial Statements Act. Copenhagen: Danish Commerce and Companies Agency
- DARNALL, N. & KIM, Y. 2012. Which types of environmental management systems are related to greater environmental improvements? *Public Administration Review*, 72, 351-365.
- DARNALL, N. & SIDES, S. 2008. Assessing the performance of voluntary environmental programs: does certification matter? *Policy Studies Journal*, 36, 95-117.
- DAVID, P., BLOOM, M. & HILLMAN, A. J. 2007. Investor activism, managerial responsiveness, and corporate social performance. *Strategic Management Journal*, 28, 91-100.
- DEEPHOUSE, D. 1996. Does isomorphism legitimate? *Academy of Management Journal*, 39, 1024-1039.
- DELMAS, M. & MONTES-SANCHO, M. 2011. An institutional perspective on the diffusion of international management system standards: the case of the environmental management standard ISO 14001. *Business Ethics Quarterly*, 21, 1052-1081.
- DELMAS, M. & MONTIEL, I. 2008. The diffusion of voluntary international management standards: Responsible Care, ISO 9000, and ISO 14001 in the chemical industry. *Policy Studies Journal*, 36, 65-93.
- DELMAS, M. A. & MONTES-SANCHO, M. J. 2010. Voluntary agreements to improve environmental quality: symbolic and substantive cooperation. *Strategic Management Journal*, 31, 575-601.
- DELMAS, M. A. & TOFFEL, M. W. 2008. Organizational responses to environmental demands: opening the black box. *Strategic Management Journal*, 29, 1027-1055.
- DENTCHEV, N. A. 2004. Corporate social performance as a business strategy. *Journal of Business Ethics*, 55, 397-412.
- DETOMASI, D. A. 2008. The political roots of corporate social responsibility. *Journal of Business Ethics*, 82, 807-819.
- DIMAGGIO, P. J. & POWELL, W. W. 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147-161.

- DIMAGGIO, P. J. & POWELL, W. W. 1991. Introduction. *In:* POWELL, W. W. & DIMAGGIO, P. J. (eds.) *The new institutionalism in organizational analysis.* The University of Chicago Press.
- DOH, J. P., HOWTON, S. D., HOWTON, S. W. & SIEGEL, D. S. 2010. Does the market respond to an endorsement of social responsibility? The role of institutions, information, and legitimacy. *Journal of Management*, 36, 1461-1485.
- EITI. 2014. What is the EITI? [Online]. Extractive Industries Transparency Initiative EITI. Available: http://eiti.org/eiti. [Accessed 04 October 2014]
- ELSBACH, K. 1994. Managing organizational legitimacy in the California cattle industry: the construction and effectiveness of verbal accounts. *Administrative Science Quarterly*, 39, 57-88.
- FIELD, A. 2009. *Discovering statistics using SPSS,* London, Sage Publications.
- FIG, D. 2007. Questioning CSR in the Brazilian Atlantic forest: the case of Aracruz Celulose SA. *Third World Quarterly*, 28, 831-849.
- FOMBRUN, C. 2005. A world of reputation research, analysis and thinking building corporate reputation through CSR initiatives: evolving standards. *Corporate Reputation Review*, 8, 7-12.
- FOMBRUN, C., GARDBERG, N. & BARNETT, M. 2000. Opportunity platforms and safety nets: corporate citizenship and reputational risk. *Business and Society Review*, 105, 85-106.
- FRIEDLAND, R. & ALFORD, R. R. 1991. Bringing society back in: symbols, practices and institutional contradictions. *In:* POWELL, W. W. & DIMAGGIO, P. J. (eds.) *The new institutionalism in organisational analysis.* Chicago: The University of Chicago Press.
- GAO, Y. Q. 2009. Corporate social performance in China: evidence from large companies. *Journal of Business Ethics*, 89, 23-35.
- GIDDENS, A. 1984. *The constitution of society: outline of the theory of structuration*, University of California Press.
- GJOLBERG, M. 2009. The origin of corporate social responsibility: global forces or national legacies? *Socio-Economic Review*, 7, 605-637.
- GREENING, D. W. & GRAY, B. 1994. Testing a model of organizational response to social and political issues. *Academy of Management Journal*, 37, 467-498.
- GREENWOOD, R. & SUDDABY, R. 2006. Institutional entrepreneurship in mature fields: the big five accounting firms. *Academy of Management Journal*, 49, 27-48.
- GRI. Reporting framework downloads [Online]. Available: <a href="http://www.globalreporting.org/ReportingFramework/ReportingFrameworkDo">http://www.globalreporting.org/ReportingFramework/ReportingFrameworkDo</a> wnloads/ [Accessed 25 Januar 2010].
- GRI. 2015. About GRI [Online]. Available: https://http://www.globalreporting.org/information/about-gri/Pages/default.aspx [Accessed 22 June 2015].
- GWARTNEY, J., LAWSON, R. & HALL, J. 2011. Economic freedom of the world: 2011 annual report. Vancouver B.C.: Fraser Institute.
- HALL, P. & SOSKICE, D. 2001. *Varieties of capitalism: the institutional foundations of comparative advantage,* Oxford, Oxford University Press, USA.
- HAMANN, R., SINHA, P., KAPFUDZARUWA, F. & SCHILD, C. 2009. Business and human rights in South Africa: an analysis of antecedents of human rights due diligence. *Journal of Business Ethics*, 87, 453-473.
- HAMID, U. & JONES, O. 2010. The United Nations Global Compact communication on progress policy: origins, trends and challenges. *In:* RASCHE, A. & KELL, G. (eds.) *The United Nations Global Compact: achivements, trends and challenges.* New York: Cambridge University Press.

- HAUNSCHILD, P. R. & MINER, A. S. 1997. Modes of interorganizational imitation: the effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 472-500.
- HESS, D. 2008. The three pillars of corporate social reporting as new governance regulation: disclosure, dialogue and development. *Business Ethics Quarterly*, 18, 447-482.
- HULL, C. E. & ROTHENBERG, S. 2008. Firm performance: the interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal*, 29, 781-789.
- HUSTED, B. 2000. A contingency theory of corporate social performance. *Business & Society*, 39, 24-48.
- IOANNOU, I. & SERAFEIM, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834-864.
- JACKSON, G. & APOSTOLAKOU, A. 2010. Corporate social responsibility in Western Europe: an institutional mirror or substitute? *Journal of Business Ethics*, 94, 371-394.
- JACKSON, G. & DEEG, R. 2006. How many varieties of capitalism? Comparing the comparative institutional analyses of capitalist diversity. Cologne: Deutsche Zentralbibliothek fuer Wirtschaftswissenschaften.
- JANNEY, J. J., DESS, G. & FORLANI, V. 2009. Glass houses? Market reactions to firms joining the UN Global Compact. *Journal of Business Ethics*, 90, 407-423.
- JENKINS, R. 2005. Globalization, corporate social responsibility and poverty. *International Affairs*, 81, 525-540.
- JEURISSEN, R. 2004. Institutional conditions of corporate citizenship. *Journal of Business Ethics*, 53, 87-96.
- JOHNSTONE, N. & LABONNE, J. 2009. Why do manufacturing facilities introduce environmental management systems? Improving and/or signaling performance. *Ecological Economics*, 68, 719-730.
- JONES, M. T. 1999. The institutional determinants of social responsibility. *Journal of Business Ethics*, 20, 163-179.
- KANG, N. 2006. A critique of the "varieties of capitalism" approach. *In:* GOND, J.-P. (ed.) *Research Paper Series International Centre for Corporate Social Responsibility.* Nottingham: Nottingham University Business School.
- KAUFMANN, D., KRAAY, A. & MASTRUZZI, M. 2009. Governance matters VIII: aggregate and individual governance indicators, 1996-2008. *The World Bank Policy Research Working Paper*. The World Bank.
- KENNEDY, M. T. & FISS, P. C. 2009. Institutionalization, framing, and diffusion: the logic of TQM adoption and implementation decisions among US hospitals. *Academy of Management Journal*, 52, 897-918.
- KILGOUR, M. A. 2007. The UN Global Compact and substantive equality for women: revealing a 'well hidden' mandate. *Third World Quarterly*, 28, 751-773.
- KIM, E.-H. & LYON, T. P. 2012. Beyond the dichotomy of symbolic versus substantive actions: evidence from corporate environmental management. *Working Paper.* University of Michigan.
- KIMBERLY, J. R. 1975. Environmental constraints and organizational structure: a comparative analysis of rehabilitation organizations. *Administrative Science Quarterly*, 1-9.
- KING, A. A. & LENOX, M. J. 2000. Industry self-regulation without sanctions: the chemical industry's Responsible Care program. *Academy of management journal*, 43, 698-716.
- KING, A. A. & LENOX, M. J. 2001. Who adopts management standards early? An examination of ISO 14001 certifications. Academy of Management Proceedings, 2001. Academy of Management, A1-A6.

- KING, A. A., LENOX, M. J. & TERLAAK, A. 2005. The strategic use of decentralized institutions: exploring certification with the ISO 14001 management standard. *Academy of Management Journal*, 48, 1091-1106.
- KNOX, S. & MAKLAN, S. 2004. Corporate social responsibility: moving beyond investment towards measuring outcomes. *European Management Journal*, 22, 508-516.
- KNUDSEN, J. S. 2011. Company delistings from the UN Global Compact: limited business demand or domestic governance failure? *Journal of Business Ethics*, 103, 331-349.
- KOSTOVA, T. & ROTH, K. 2002. Adoption of an organizational practice by subsidiaries of multinational corporations: institutional and relational effects. *Academy of management journal*, 45, 215-233.
- KOSTOVA, T. & ZAHEER, S. 1999. Organizational legitimacy under conditions of complexity: the case of the multinational enterprise. *Academy of Management Review*, 24, 64-81.
- KUNTZ, E. C., KEDIA, B. L. & WHITEHEAD, C. J. 1980. Variations in corporate social performance. *California Management Review*, 22, 30-36.
- LAWRENCE, T., SUDDABY, R. & LECA, B. 2011. Institutional work: refocusing institutional studies of organization. *Journal of Management Inquiry*, 20, 52-58.
- LAWRENCE, T. B. & SUDDABY, R. 2006. Institutions and institutional work. *In:* CLEGG, S., HARDY, C., LAWRENCE, S. & NORD, W. (eds.) *The SAGE Handbook of Organization Studies.* London: SAGE Publications.
- LEIPZIGER, D. 2003. *The corporate responsability: code book,* Sheffield, Greenleaf Publishing.
- LEIPZIGER, D. 2010. *The corporate responsibility code book*, Sheffield, Greenleaf Publishing.
- LERNER, L. D. & FRYXELL, G. E. 1988. An empirical-study of the predictors of corporate social performance a multi-dimensional analysis. *Journal of Business Ethics*, 7, 951-959.
- LEVY, D. & KOLK, A. 2002. Strategic responses to global climate change: conflicting pressures on multinationals in the oil industry. *Business and Politics*, 4, 275-300.
- LEVY, F. K. & SHATTO, G. M. 1978. The evaluation of corporate contributions. *Public Choice*, 33, 19-28.
- LIM, A. & TSUTSUI, K. 2012. Globalization and commitment in corporate social responsibility: cross-national analyses of institutional and political-economy effects. *American Sociological Review*, 77, 69-98.
- LODGE, G. & WILSON, C. 2006. A corporate solution to global poverty: how multinationals can help the poor and invigorate their own legitimacy, Princeton, Princeton University Press.
- LOVE, E. G. & CEBON, P. 2008. Meanings on multiple levels: the influence of field-level and organizational-level meaning systems on diffusion. *Journal of Management Studies*, 45, 239-267.
- LUNDVALL, B. 1999. National business systems and national systems of innovation. *International Studies of Management & Organization*, 29, 60-77.
- LUO, X. & BHATTACHARYA, C. B. 2009. The debate over doing good: corporate social performance, strategic marketing levers, and firm-idiosyncratic risk. *Journal of Marketing*, 73, 198-213.
- MARCH, J. G. & SIMON, H. A. 1993. *Organizations (2nd edn)*, Cambridge, Massachusetts, Basil Blackwell.
- MARQUIS, C., GLYNN, M. A. & DAVIS, G. F. 2007. Community isomorphism and corporate social action. *Academy of Management Review*, 32, 925-945.
- MARTIN, K. D., CULLEN, J. B., JOHNSON, J. L. & PARBOTEEAH, K. P. 2007. Deciding to bribe: a cross-level analysis of firm and home country influences on bribery activity. *Academy of Management Journal*, 50, 1401-1422.

- MATTEN, D. & MOON, J. 2008. "Implicit" and "explicit" CSR: a conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33, 404-424.
- MCGUIRE, J. B., SUNDGREN, A. & SCHNEEWEIS, T. 1988. Corporate social responsibility and firm financial performance. *Academy of Management Journal*, 31, 854-872.
- MCINTOSH, M., THOMAS, R., LEIPZIGER, D. & COLEMAN, G. 2003. Living corporate citizenship: Strategic routes to socially responsible business, Prentice Hall Financial Times.
- MCINTOSH, M., WADDOCK, S. & KELL, G. 2004a. Introduction. *In:* MCINTOSH, M., WADDOCK, S. & KELL, G. (eds.) *Learning to talk corporate citizenship and the development of the UN Global Compact.* Sheffield: Greenleaf.
- MCINTOSH, M., WADDOCK, S. & KELL, G. 2004b. Learning to talk corporate citizenship and the development of the UN Global Compact, Sheffield, Greenleaf Publishing.
- MELNYK, S. A., SROUFE, R. P. & CALANTONE, R. J. 2003. A model of site-specific antecedents of ISO 14001 certification. *Production and Operations Management*, 12, 369-385.
- MEYER, J. W. & ROWAN, B. 1977. Institutionalized organizations: formal structure as myth and ceremony. *The American Journal of Sociology*, 83, 340-363.
- MEYER, W. H. & STEFANOVA, B. 2001. Human rights, the UN Global Compact, and global governance. *Cornell International Law Journal*, 34, 501-521.
- MOON, J. 2007. The contribution of corporate social responsibility to sustainable development. Sustainable Development, 15, 296-306.
- MORGAN, G. & KRISTENSEN, P. H. 2006. The contested space of multinationals: varieties of institutionalism, varieties of capitalism. *Human Relations*, 59, 1467-1490.
- MUECKENBERGER, U. & JASTRAM, S. 2010. Transnational norm-building networks and the legitimacy of corporate social responsibility standards. *Journal of Business Ethics*, 97, 223-239.
- MULLER, A. & KOLK, A. 2010. Extrinsic and intrinsic drivers of corporate social performance: evidence from foreign and domestic firms in Mexico. *Journal of Management Studies*, 47, 1-26.
- NASON, R. W. 2008. Structuring the global marketplace: the impact of the United Nations Global Compact. *Journal of Macromarketing*, 28, 418-425.
- NAVEH, E., MARCUS, A. & MOON, H. K. 2004. Implementing ISO 9000: performance improvement by first or second movers. *International Journal of Production Research*, 42, 1843-1863.
- NEACE, M. B. 2007. The UN Global Compact: moving toward sustainable development by adopting a new paradigm. *Ecosystems and Sustainable Development VI*, 106, 25-34.
- NEUMAYER, E. & PERKINS, R. 2004. What explains the uneven take-up of ISO 14001 at the global level? A panel data analysis. *Environment and Planning A*, 36, 823-839.
- OECD. 2015. About the OECD Guidelines for Multinational Enterprises [Online]. Available: http://mneguidelines.oecd.org/about/ [Accessed 23 June 2015].
- OLIVER, C. 1991. Strategic responses to institutional processes. *Academy of Management Review*, 16, 145-179.
- OLIVER, C. 1992. The antecedents of deinstitutionalization. *Organization Studies*, 13, 563-588.
- ÖZEN, Ş. & KÜSKÜ, F. 2009. Corporate environmental citizenship variation in developing countries: an institutional framework. *Journal of Business Ethics*, 89, 297-313.
- PELOZA, J. 2009. The challenge of measuring financial impacts from investments in corporate social performance. *Journal of Management*, 35, 1518-1541.

- PEREZ-BATRES, L. A., DOH, J. P., MILLER, V. V. & PISANI, M. J. 2012a. Stakeholder pressures as determinants of CSR strategic choice: why do firms choose symbolic versus substantive self-regulatory codes of conduct? *Journal of Business Ethics*, 110, 157-172.
- PEREZ-BATRES, L. A., MILLER, V. V. & PISANI, M. J. 2010. CSR, sustainability and the meaning of global reporting for Latin American corporations. *Journal of Business Ethics*, 1-17.
- PEREZ-BATRES, L. A., MILLER, V. V. & PISANI, M. J. 2011. Institutionalizing sustainability: an empirical study of corporate registration and commitment to the United Nations Global Compact guidelines. *Journal of Cleaner Production*, 19, 843-851.
- PEREZ-BATRES, L. A., MILLER, V. V., PISANI, M. J., HENRIQUES, I. & RENAU-SEPULVEDA, J. A. 2012b. Why do firms engage in national sustainability programs and transparent sustainability reporting? Evidence from Mexico's clean industry program. *Management International Review*, 52, 107-136.
- PERKINS, R. & NEUMAYER, E. 2010. Geographic variations in the early diffusion of corporate voluntary standards: comparing ISO 14001 and the Global Compact. *Environment and Planning A*, 42, 347-365.
- PORTER, M. E. & KRAMER, M. R. 2006. Strategy and society. *Harvard Business Review*, 84, 78-92.
- POTOSKI, M. & PRAKASH, A. 2005a. Covenants with weak swords: ISO 14001 and facilities' environmental performance. *Journal of policy analysis and management*, 24, 745-769.
- POTOSKI, M. & PRAKASH, A. 2005b. Green clubs and voluntary governance: ISO 14001 and firms' regulatory compliance. *American Journal of Political Science*, 49, 235-248.
- PRASAD, B. C. 2004. Globalisation, free trade and corporate citizenship in Pacific Forum Island Countries: how relevant is the United Nations Global Compact? *Journal of Corporate Citizenship*, 13, 65-76.
- PREUSS, L. 2010. Codes of conduct in organisational context: from cascade to lattice-work of codes. *Journal of Business Ethics*, 94, 471-487.
- PRME. 2013. *PRME* [Online]. Available: <a href="http://www.unprme.org/index.php">http://www.unprme.org/index.php</a> [Accessed 17 June 2014].
- RASCHE, A. 2009a. "A necessary supplement" What the United Nations Global Compact is and is not. *Business & Society*, 48, 511-537.
- RASCHE, A. 2009b. Toward a model to compare and analyze accountability standards The case of the UN Global Compact. *Corporate Social Responsibility and Environmental Management*, 16, 192-205.
- RASCHE, A. & KELL, G. 2010. *The United Nations Global Compact: achievements, trends and challenges,* Cambridge, Cambridge University Press.
- REED, M. 2003. The agency/structure dilemma in organization theory: open doors and brick walls. *In:* TSOUKAS, H. & KNUDSEN, C. (eds.) *The Oxford handbook of organization theory.* Oxford.
- REID, E. M. & TOFFEL, M. W. 2009. Responding to public and private politics: corporate disclosure of climate change strategies. *Strategic Management Journal*, 30, 1157-1178.
- REVERTE, C. 2009. Determinants of corporate social responsibility disclosure ratings by Spanish listed firms. *Journal of Business Ethics*, 88, 351-366.
- RIVERA, J., DE LEON, P. & KOERBER, C. 2006. Is greener whiter yet? The sustainable slopes program after five years. *Policy Studies Journal*, 34, 195-221.
- ROULET, T. & TOUBOUL, S. 2014. The intentions with which the road is paved: attitudes to liberalism as determinants of greenwashing. *Journal of Business Ethics*, 1-16.

- RUNHAAR, H. & LAFFERTY, H. 2009. Governing corporate social responsibility: an assessment of the contribution of the UN Global Compact to CSR strategies in the telecommunications industry. *Journal of Business Ethics*, 84, 479-495.
- SCHEMBERA, S. 2012. Implementing corporate social responsibility: empirical insights on the impact and accountability of the UN Global Compact. Zurich: University of Zurich.
- SCHERER, A. G., PALAZZO, G. & BAUMANN, D. 2006. Global rules and private actors: toward a new role of the transnational corporation in global governance. *Business Ethics Quarterly*, 16, 505-532.
- SCHULER, D. A. & CORDING, M. 2006. A corporate social performance-corporate financial performance behavioral model for consumers. *Academy of Management Review*, 31, 540-558.
- SCOTT, W. R. 1995. *Institutions and organizations*, California, Sage.
- SCOTT, W. R. 2008. *Institutions and organisations: ideas and interests,* California, Sage.
- SETHI, S. P. 1975. Dimensions of corporate social performance: an analytical framework *California Management Review*, 17, 58-64.
- SHERER, P. D. & LEE, K. 2002. Institutional change in large law firms: a resource dependency and institutional perspective. *Academy of Management Journal*, 45, 102-119.
- SIMS, R. 2009. Collective versus individualist national cultures: comparing Taiwan and US employee attitudes toward unethical business practices. *Business & Society*, 48, 39.
- SLATER, D. J. & DIXON-FOWLER, H. R. 2009. CEO international assignment experience and corporate social performance. *Journal of Business Ethics*, 89, 473-489.
- SMITH, J. 2010. Power, interests, and the United Nations Global Compact. *In:* PORTER, T. & RONIT, K. (eds.) *The challenges of global business authority: democratic renewal, stalemate, or decay?* Albany, NY: State University of New York Press.
- SONPAR, K., PAZZAGLIA, F. & KORNIJENKO, J. 2010. The paradox and constraints of legitimacy. *Journal of Business Ethics*, 95, 1-21.
- SPICER, A., DUNFEE, T. & BAILEY, W. 2004. Does national context matter in ethical decision making? An empirical test of integrative social contracts theory. *Academy of Management Journal*, 47, 610-622.
- STANWICK, P. A. & STANWICK, S. A. 1998. The relationship between corporate social performance, and organizational size, financial performance, and environmental performance: an empirical examination. *Journal of Business Ethics*. 17, 195-204.
- SUCHMAN, M. C. 1995. Managing legitimacy: strategic and institutional approaches. *Academy of Management Review,* 20, 571-610.
- TAMBUNLERTCHAI, K., KONTOLEON, A. & KHANNA, M. 2013. Assessing participation in voluntary environmental programmes in the developing world: the role of FDI and export orientation on ISO14001 adoption in Thailand. *Applied Economics*, 45, 2039-2048.
- THERIEN, J.-P. & POULIOT, V. 2006. The Global Compact: shifting the politics of international development? *Global Governance*, 12, 55-75.
- THOMSONREUTERS 2014. ASSET4 ESG data. In: THOMSONREUTERS (ed.).
- THORNTON, P. H. & OCASIO, W. 2008. Institutional logics. *In:* GREENWOOD, R., OLIVER, C., SAHIN, K. & SUDDABY, R. (eds.) *The Sage handbook of organizational institutionalism.* London.
- THORNTON, P. H., OCASIO, W. & LOUNSBURY, M. 2012. The institutional logics perspective: a new approach to culture, structure, and process, Oxford, Oxford University Press.

- TOFFEL, M. W. 2005. Resolving information asymmetries in markets: the role of certified management programs. Berkeley: University of California, Berkeley.
- TOLBERT, P. S. & ZUCKER, L. G. 1983. Institutional sources of change in the formal structure of organizations: the diffusion of civil service reform, 1880-1935. *Administrative science quarterly*, 22-39.
- TOLBERT, P. S. & ZUCKER, L. G. 1996. The institutionalization of institutional theory. *In:* CLEGG, S., HARDY, C. & NORD, W. (eds.) *Handbook of organizational studies*. London: SAGE.
- UN 1999. Secretary-general proposes global compact on human rights, labour, environment, in address to world economic forum in davos.
- UNGC. *The ten principles* [Online]. New York. Available: <a href="http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html">http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html</a> [Accessed 25 January 2010].
- UNGC. 2003. Global Compact & GRI strengthen cooperation [Online]. Available: <a href="http://www.unglobalcompact.org/NewsAndEvents/news\_archives/2003\_03\_1">http://www.unglobalcompact.org/NewsAndEvents/news\_archives/2003\_03\_1</a> 8.html [Accessed 13 May 2014].
- UNGC. 2007. *Update on UNGC-GRI value platform* [Online]. Available: <a href="http://www.unglobalcompact.org/NewsAndEvents/news\_archives/2008\_01\_2">http://www.unglobalcompact.org/NewsAndEvents/news\_archives/2008\_01\_2</a> 2.html [Accessed 13 May 2014].
- UNGC. 2013a. *Civil society organisations* [Online]. Available: <a href="http://www.unglobalcompact.org/ParticipantsAndStakeholders/civil\_society.ht">http://www.unglobalcompact.org/ParticipantsAndStakeholders/civil\_society.ht</a> ml [Accessed 20 November 2013].
- UNGC. 2013b. Expelled participants [Online]. Available: <a href="http://www.unglobalcompact.org/COP/analyzing\_progress/expelled\_participa">http://www.unglobalcompact.org/COP/analyzing\_progress/expelled\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompact.org/COP/analyzing\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompact.org/COP/analyzing\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompact.org/COP/analyzing\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompact.org/COP/analyzing\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompact.org/COP/analyzing\_participa</a> <a href="http://www.unglobalcompact.org/COP/analyzing\_participa">http://www.unglobalcompac
- UNGC. 2013c. *Global Compact LEAD* [Online]. Available: <a href="http://www.unglobalcompact.org/HowToParticipate/Lead/index.html">http://www.unglobalcompact.org/HowToParticipate/Lead/index.html</a> [Accessed 14 November 2013].
- UNGC 2013d. Global corporate sustainability report 2013. New York: UNGC.
- UNGC. 2013e. How to participate business organisations [Online]. Available: <a href="http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.">http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.</a> <a href="http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.">http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.</a> <a href="http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.">http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.</a> <a href="http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.">http://www.unglobalcompact.org/HowToParticipate/How\_to\_Apply\_Business.</a>
- UNGC. 2013f. Overview of the UNGC [Online]. Available: <a href="http://www.unglobalcompact.org/AboutTheGC/">http://www.unglobalcompact.org/AboutTheGC/</a> [Accessed 22 November 2013].
- UNGC. 2013g. Participants and stakeholders academia [Online]. Available: <a href="http://www.unglobalcompact.org/ParticipantsAndStakeholders/academic\_participation.html">http://www.unglobalcompact.org/ParticipantsAndStakeholders/academic\_participation.html</a> [Accessed 17 September 2013].
- UNGC. 2013h. *UN Global Compact participants* [Online]. Available: <a href="http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html">http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html</a> [Accessed 22 November 2013].
- UNGC. 2013i. *UN Global Compact participants* [Online]. Available: <a href="http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html">http://www.unglobalcompact.org/ParticipantsAndStakeholders/index.html</a> [Accessed 18 September 2013].
- UNGC. 2013j. UN Global Compact policy on communicating progress [Online]. Available:

  <a href="http://www.unglobalcompact.org/docs/communication\_on\_progress/COP\_Policy.pdf">http://www.unglobalcompact.org/docs/communication\_on\_progress/COP\_Policy.pdf</a> [Accessed 13 November 2013].
- UNGC. 2014. *Global Compact principle 10* [Online]. Available: <a href="http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/principle10.h">http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/principle10.h</a> tml [Accessed 20 May 2014].
- UTTING, P. 2001. UN-Business partnerships: whose agenda counts? *Transnational Associations-Associations Transnationales*, 118-129.
- UTTING, P. 2002. The greening of business in developing countries: rhetoric, reality and prospects. London, Zed Books.

- 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, 407-424.
- VAN BUREN, H. J. 2005. An employee-centered model of corporate social performance. *Business Ethics Quarterly*, 15, 687-709.
- VAUGHAN, D. 1999. The dark side of organizations: mistake, misconduct, and disaster. *Annual Review of Sociology*, 25, 271-305.
- VIADIU, F. M., FA, M. C. & SAIZARBITORIA, I. H. 2006. ISO 9000 and ISO 14000 standards: an international diffusion model. *International Journal of Operations & Production Management*, 26, 141-165.
- VIDERAS, J. & ALBERINI, A. 2000. The appeal of voluntary environmental programs: which firms participate and why? *Contemporary Economic Policy*, 18, 449-460.
- WADDOCK, S. 2008. Building a new institutional infrastructure for corporate responsibility. *Academy of Management Perspectives*, 22, 87-108.
- WADDOCK, S. A. & GRAVES, S. B. 1997. The corporate social performance-financial performance link. *Strategic Management Journal*, 18, 303-319.
- WALDMAN, D. A., DE LUQUE, M. S., WASHBURN, N., HOUSE, R. J., ADETOUN, B., BARRASA, A., BOBINA, M., BODUR, M., CHEN, Y. J., DEBBARMA, S., DORFMAN, P., DZUVICHU, R. R., EVCIMEN, I., FU, P. P., GRACHEV, M., DUARTE, R. G., GUPTA, V., DEN HARTOG, D. N., DE HOOGH, A. H. B., HOWELL, J., JONE, K. Y., KABASAKAL, H., KONRAD, E., KOOPMAN, P. L., LANG, R., LIN, C. C., LIU, J., MARTINEZ, B., MUNLEY, A. E., PAPALEXANDRIS, N., PENG, T. K., PRIETO, L., QUIGLEY, N., RAJASEKAR, J., RODRIGUEZ, F. G., STEYRER, J., TANURE, B., THIERRY, H., THOMAS, V. M., VAN DEN BERG, P. T. & WILDEROM, C. P. M. 2006. Cultural and leadership predictors of corporate social responsibility values of top management: a GLOBE study of 15 countries. *Journal of International Business Studies*, 37, 823-837.
- WARTICK, S. L. & COCHRAN, P. L. 1985. The evolution of the corporate social performance model. *The Academy of Management Review*, 10, 758-769.
- WEAVER, G. R., TREVINO, L. K. & COCHRAN, P. L. 1999. Integrated and decoupled corporate social performance: management commitments, external pressures, and corporate ethics practices. *Academy of Management Journal*, 42, 539-552.
- WESTPHAL, J. D., GULATI, R. & SHORTELL, S. M. 1997. Customization or conformity? An institutional and network perspective on the content and consequences of TQM adoption. *Administrative Science Quarterly*, 366-394.
- WESTPHAL, J. D. & ZAJAC, E. J. 2001. Decoupling policy from practice: the case of stock repurchase programs. *Administrative Science Quarterly*, 46, 202-228.
- WHITLEY, R. 1999. Divergent capitalisms: the social structuring and change of business systems, Oxford, Oxford University Press.
- WITTE, J. & REINICKE, W. 2005. Business UNusual: facilitating United Nations reform through partnerships. New York: UNGC.
- WOOD, D. J. 1991a. Corporate social performance revisited. *The Academy of Management Review*, 16, 691-718.
- WOOD, D. J. 1991b. Social-issues in management: theory and research in corporate social performance. *Journal of Management*, 17, 383-406.
- WOOD, D. J. & JONES, R. E. 1995. Stakeholder mismatching: a theoretical problem in empirical research on corporate social performance. *International Journal of Organizational Analysis* 3, 229.
- YANG, X. H. & RIVERS, C. 2009. Antecedents of CSR practices in MNCs' subsidiaries: a stakeholder and institutional perspective. *Journal of Business Ethics*, 86, 155-169.

- YIN, H. & SCHMEIDLER, P. J. 2009. Why do standardized ISO 14001 environmental management systems lead to heterogeneous environmental outcomes? *Business Strategy and the Environment*, 18, 469-486.
- YOUNG, G. J., CHARNS, M. P. & SHORTELL, S. M. 2001. Top manager and network effects on the adoption of innovative management practices: a study of TQM in a public hospital system. *Strategic Management Journal*, 22, 935-951.
- ZIETSMA, C. & LAWRENCE, T. B. 2010. Institutional work in the transformation of an organizational field: the interplay of boundary work and practice work. *Administrative Science Quarterly*, 55, 189-221.