

UNDERSTANDING CROSS-NATIONAL VARIATION IN  
CORPORATE SOCIAL PERFORMANCE:  
A COMPARATIVE INSTITUTIONAL ANALYSIS

by

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A Thesis submitted to the Faculty of Graduate Studies of  
The University of Manitoba  
in partial fulfilment of the requirements of the degree of

MASTER OF SCIENCE

Asper School of Business  
University of Manitoba  
Winnipeg

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## ABSTRACT

This study adopts a comparative institutional approach to address the question of why corporate social performance (CSP) tends to vary cross-nationally. Using a sample of 1551 firms from 20 different countries, I test the relationships between key institutional variables suggested in the varieties of capitalism literature (see Hall & Soskice, 2001) and corporate social performance. Specifically, I test the relationships between coordination in corporate governance and labour relations and CSP. To provide a comprehensive measure of CSP, I separately measure different *dimensions* of CSP (social and environmental) and *categories* of CSP (processes and outcomes).

The results indicated that the market economy firms are embedded within produces differences in how they perform on social and environmental dimensions. In particular, national-level coordination in corporate governance was found to produce differences in both the *processes* firms adopt to address social and environmental issues and the *outcomes* and impacts of firm actions on social and environmental dimensions. These institutional factors were found to be stronger predictors of CSP than both cultural differences and differences in industry composition.

The results of this study lend support to the argument that CSP is driven by institutions at the national-level. I discuss the implications of these findings and chart out a course for future research in the area.

**Keywords:** Corporate social performance; Institutions; Varieties of Capitalism

## ACKNOWLEDGEMENTS

This thesis (and my future work) would not have been possible without the help of many people. These individuals have, in many different ways, made the academic journey a less lonely one. I am deeply indebted to each of them. First, I would like to thank my advisor, John Godard. He played a major role (whether he likes it or not) in my decision to pursue the path of academia. When I work on my own research now, it is still his comments that I hear in my mind. I know that his commitment and dedication will continue to be an inspiration to me as I move forward in my own research.

I am also indebted to my other thesis committee members, Bruno Dyck and Gregg Olsen. Their feedback has played a major role in the shaping of this project. It was in Bruno's undergraduate class where I first became energized to pursue this path. This was largely due to Bruno's own passion and commitment. He has always been extremely helpful in guiding me when I was unsure of what to do - which was often! I will always appreciate his kindness to me during my "uncertain years".

Several scholars at the University of Manitoba and York University have helped me shape this project. I would like to thank Hari Bapuji, Sergio Carvalho, Kelley Main, and Glenn Stalker for their helpful feedback at various stages of this project.

Having to begin my PhD at York University before finishing my M.Sc. thesis presented several challenges. Several people made this easier for me to handle. I would like to thank Sara Sealey, Ewa Morphy, and Pat Bradshaw for all their help in balancing both programs.

The support of my family and friends has been wonderful throughout it all. Somewhere

along the way, I became one of those career students and have received so much support from my Mom and Dad, Grandparents, and friends. I couldn't have done it without them.

Most of all, I thank Nicky. I could not have wished for a more supportive, loving, and wonderful person to have in my life. In fact, I'm going to stop doing these acknowledgements right now so I can walk into the living room and give her a big kiss.

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## CHAPTER 1. INTRODUCTION

A central objective of business and society research is to understand what drives corporate social performance (CSP) (see Wood, 2010). In other words, what variables influence how firms perform on social and environmental dimensions? Research in the area has suggested that several actors may drive the CSP of individual firms (see Crane et al., 2008) including top managers (Carroll, 1979; Chen, 2010; Swanson, 1995, 1998, 2008; Wartick & Cochran, 1985), consumers (Smith, 2008; Vogel, 1978), and shareholders (Kurtz, 2008; Rivoli, 2003). While these studies offer useful insights into how actors influence CSP at the firm-level, they tend to downplay possible national-level structural and institutional factors that may drive CSP (Campbell, 2007). In fact, several studies have suggested that cross-national variation in CSP does exist (Blasco & Zølner, 2010; Brammer & Pavelin, 2005; Doh & Guay, 2006; Gjørberg, 2009; Cuesta Gonzalez & Valor Martinez, 2004; Maignan & Ralston, 2002; Ringov & Zollo, 2007). This variation exists in the language firms use to discuss social and environmental issues (Maignan & Ralston, 2002), the *processes* firms adopt to address social and environmental issues (Gjørberg, 2009), and the social and environmental *outcomes* of firm actions (Brammer & Pavelin, 2005). This cross-national variation suggests that CSP is associated with specific national-level variables. Yet, few studies have examined what variables these are.

Recently however, a group of conceptual studies has emerged which offer a basis for understanding why this variation occurs (e.g. Aguilera, Rupp, Williams, & Ganapathi, 2007; Campbell, 2007; Matten & Moon, 2008). While these studies differ in specifics, a common theme in each is that firms are embedded in a broad set of economic, political, and social *institutions* which affect their actions (Hall & Soskice, 2001). It is argued by these scholars that

national-level institutions influence CSP by enabling and constraining firm actions in specific ways; the results of which can be seen in national differences in CSP. For example, Campbell (2007) highlights specific institutional conditions (e.g. institutionalized dialogue with unions and other stakeholders) under which firms are more likely to act in a “responsible” manner. Matten and Moon (2008) take this a step further by arguing that historically-informed institutions shape unique “national business systems” (Whitley, 1999) which influence corporate social responsibility (CSR) at the national-level. Adopting a similar form of comparative institutional analysis, Aguilera et al. (2007) argue that institutional differences in key areas such as national corporate governance systems lead to differing pressures on organizations to engage in social and environmental initiatives. Overall, these studies use a comparative institutional lens rooted in socio-economics (see Hall & Soskice, 2001; Whitley, 1999) to explain cross-national variation in CSP.

The above studies provide a strong theoretical framework for empirical research examining the national-level drivers of corporate social performance; however, this task has yet to be undertaken in the business and society literature. In this study, I address this gap by empirically examining the relationship between key national-level institutional variables and CSP. Understanding the national-level drivers of CSP is valuable since it provides a means to interpret cross-national variation in CSP that moves beyond cultural explanations where differences in firm actions across countries are simply attributed to cultural differences between nations (cf. Hofstede, 1980; Ringov & Zollo, 2007). Instead, an institutional approach is more nuanced and dynamic in that it focuses on how formal and informal rules (and structures) both enable and constrain the actions of firms in ways that influence CSP at the national-level (see

Matten & Moon, 2008). While cultural differences play a role in this, they are insufficient at explaining why the actions of firms vary cross-nationally (Godard, 2004). Furthermore, a national-level institutional approach is less focused on how individual actors influence CSP and instead seeks to understand how broader institutional factors drive CSP on a broader scale. In other words, an account of the institutional variables associated with CSP at the national-level fleshes out the existing literature by providing a macro perspective on what drives firm performance on social and environmental dimensions.

The comparative institutional approach employed in this study draws from studies of corporate governance (e.g. Aguilera & Jackson, 2003), comparative political economy (e.g. Hall & Soskice, 2001), and recent institutional studies in business and society (Aguilera et al., 2007; Campbell, 2007; Matten & Moon, 2008). The starting point of comparative institutional analysis is that “formal institutions, such as constitutions, laws and government policies, interact with both formal and informal institutions such as social norms...and organizations such as business entities, labour organizations and civil society, to produce unique cultural and institutional frameworks for company action” (Williams & Aguilera, 2008: 456). Following the lead of Gjølborg (2009), I draw primarily from the Varieties of Capitalism (VoC) literature as a theoretical framework (see Hall & Soskice, 2001; Hall & Gingrich, 2009). Briefly, the VoC approach suggests that capitalist economies can be distinguished by the ways in which firms embedded within them coordinate their activities (Hall & Soskice, 2001). Nations tend to cluster together into “identifiable groups based on the extent to which firms rely on market or strategic modes or coordination” (Hall & Gingrich, 2009: 450). VoC researchers argue that these differences in coordination have implications for “economic performance, comparative

institutional advantage, national responses to globalization, and comparative public policy” (Hall & Gingrich, 2009: 450). However, several scholars have noted that the institutional differences suggested by VoC scholars are also likely to have implications for national-level CSP (Aguilera et al., 2007; Campbell, 2007; Gjørlberg, 2009; Matten & Moon, 2008). In this study, I focus on two key variables associated with the VoC approach: corporate governance and labour relations (see Hall & Gingrich, 2009). I argue that differences in coordination in these areas at the national-level produces differences in firm performance on social and environmental dimensions. Thus, the VoC framework provides a useful means to understand and interpret cross-national variation in CSP.

The remainder of this study is presented in five major sections. First, I theoretically position the study by discussing the construct of CSP and by briefly reviewing the VoC approach and the literature suggesting a relationship between institutions and CSP. Second, drawing from these literatures, I develop hypotheses predicting how variables associated with the VoC approach will be associated with CSP. Third, I discuss the methods employed and present the results from the regression analysis and diagnostic tests. Fourth, I discuss the findings and highlight their implications for both CSP research and comparative institutional analysis. Finally, I highlight some of the key limitations of the study and make suggestions for future research.

## CHAPTER 2. THEORETICAL FRAMEWORK

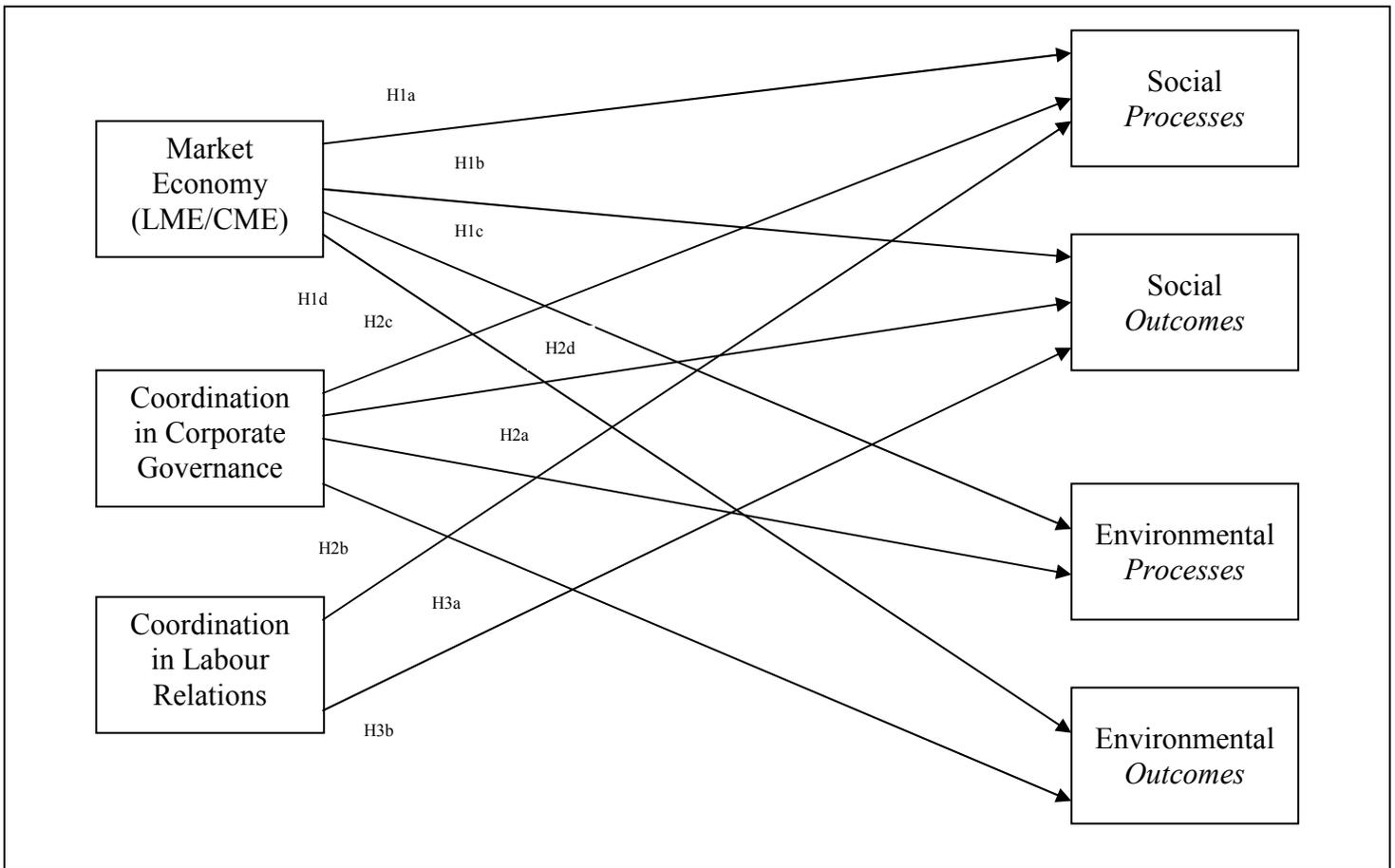
The model presented in this study is based on the premise that national coordination in key areas influences the CSP of firms based within these nations (see Gjølborg, 2009). However, CSP is not necessarily a construct that can be captured in a unidimensional measure. Scholars have increasingly noted that CSP is a multidimensional construct and studies should avoid the use of aggregated measures in empirical studies (Griffin & Mahon, 1997; Johnson & Greening, 1999; Rowley & Berman, 2000; Wood, 2010). Indeed, institutional variables are likely to affect different dimensions of CSP in different ways (Johnson & Greening, 1999). For example, these variables may have different relationships with CSP *processes* and CSP *outcomes*. Furthermore, these institutional variables may have differing effects on *social* and *environmental* dimensions of CSP. Accordingly, in this study, I examine the effects of national-level institutional variables (labour relations, corporate governance, market economy) on different *categories* of CSP (*processes* and *outcomes*) and on different *dimensions* of CSP (*social* and *environmental*). Figure #1 presents a conceptual model for the study. In this section, I elaborate further on the development of my constructs of corporate social performance and national-level institutions.

### 2.1. Corporate Social Performance

Corporate social performance, as outlined by Wood (1991, 2010), is said to consist of a set of three structural categories including: (1) *principles* of social responsibility; (2) *processes* of social responsiveness; and (3) *outcomes* of corporate actions (Wood, 1991). CSP *principles* refer to “the degree to which principles of social responsibility motivate action taken on behalf of the company” (1991: 693). CSP *processes* refer to firm-level “policies and programs to manage the firm’s societal relationships” (Wood, 1991: 693). CSP *outcomes* refer to the “social (and

environmental) impacts of the firm’s actions, programs, and policies” (Wood, 1991: 693). This basic input-throughput-output framework has been adopted by many scholars in the business and society literature (e.g. Agle & Kelley, 2001; Mitnick, 2000; Swanson, 1995, 1999).

**Figure #1 – Conceptual Model**



In this study, I tested the relationships between national-level institutional variables and CSP *processes* and CSP *outcomes*. I excluded the CSP *principles* (motives) component of Wood’s framework from my analysis for two reasons: one conceptual and one methodological.

From a conceptual standpoint, I didn't measure the motives underlying firm actions because it can be argued that firms need not have motives of social responsibility to have a strong performance on *processes* and *outcomes*. This is especially evident in a cross-national context. Firms in different countries are likely to show considerable variation in the motives behind their actions toward social and environmental issues, yet these motives are not likely to be related to their performance on CSP *processes* and *outcomes* (Maignan & Ralston, 2002; Matten & Moon, 2008). For example, in countries where social responsibility is embedded in broader institutions, firms are likely to express fewer *explicit* motives of social responsibility (Matten & Moon, 2008), but might still perform strongly on social and environmental dimensions—perhaps even stronger than firms in countries who display more pronounced *explicit* motives of social responsibility (Campbell, 2007). While certain scholars argue that a strong CSP requires that firms *voluntarily* pursue positive social and environmental *processes* and *outcomes* (i.e. demonstrate strong *principles* of social responsibility) (Agle & Kelley, 2001; Swanson, 1999; Wood, 1991), in this study I followed the lead of other scholars who argue that firm compliance with formal and informal societal rules (regardless of motives) can still result in a strong performance on CSP *processes* and *outcomes* (Carroll, 1979; Matten & Moon, 2008).

Second, from a methodological perspective, I excluded the motivating *principles* component because capturing the true motives underlying firm actions is extremely difficult to do. As neo-institutional theorists in organizational studies have repeatedly pointed out, the motives of actors are often shaped by the institutional context the actor (or firm) is embedded within (Powell & DiMaggio, 1991). Thus, firm actions do not occur in a vacuum. Rather, they are more likely to be a reflection of their institutional environment (Meyer & Rowan, 1977).

Because of this, the actual motives of firm actions may not be readily communicated by firm-level actors (DiMaggio & Powell, 1983). Other times, firms and actors may simply be unwilling to communicate true motives due to pressures for social desirability. This is especially likely in cases when firms feel social pressure to engage in particular actions, as is often the case with corporate performance on social and environmental dimensions (Randall & Fernandes, 1991). For these reasons, the CSP categories measured in this study are *processes* and *outcomes*.

My decision to separately measure CSP *processes* and CSP *outcomes* was motivated by two insights in the literature. First, firms may have a strong performance on CSP *outcomes* and a weak performance on CSP *processes* (Matten & Moon, 2008). For example, as Matten and Moon (2008) indicate, European firms may be less likely to adopt explicit social and environmental policies and programs, yet may still perform highly with regard to their impacts on social and environmental dimensions. In these cases, these firms may ‘score’ high on *outcomes* but low on *processes*. Second, it is also possible that in certain cases the opposite is true—that is, firms may perform strongly with regard to *processes*, but perform weakly with regard to *outcomes*. The rationale behind the adoption of CSP *processes* by these firms may be strategic as they seek a competitive advantage over rival firms (McWilliams, Siegel, & Wright, 2006), or can be a form of impression management or “greenwashing” whereby firms adopt CSP *processes* to pre-empt public and governmental scrutiny (Laufer, 2003). This is not to suggest that CSP *processes* and *outcomes* are not related. In many cases, the adoption of *processes* is likely to be positively associated with CSP *outcomes* (Wood, 1991). However, as these examples indicate, it cannot always be assumed that CSP *processes* and *outcomes* are positively related to each other. Accordingly, in this study I measured CSP *processes* and *outcomes* as

separate variables.

In addition to demarcating CSP into different categories (*processes* and *outcomes*), I also measured both *social* and *environmental* dimensions of CSP. As several scholars have noted, it cannot be assumed that firms perform on all CSP dimensions equally (Carroll, 2000; Rowley & Berman, 2000; Wood, 2010). In fact, in many cases firms may have a high performance on one dimension and a low performance on another (Rowley & Berman, 2000). In these cases, a unidimensional measure of CSP would not capture the nuances of firm performance, and instead might reflect a “cancelling out” effect of opposing scores on different dimensions. Therefore, following the suggestion of Rowley and Berman (2000), I separately measured *social* and *environmental* dimensions of CSP.

## **2.2. Institutions and Corporate Social Performance**

A central assumption in this study is that firms do not behave as isolated entities. Rather, they are embedded in broader environments composed of economic, political, and social institutions which affect their actions (Godard, 2008). Institutions, for the purposes of this study, refer to formal and informal rules, regulations, norms, and incentive structures that enable and constrain the behaviour of actors (Campbell, 2004; Godard, 2008; Scott, 2001)<sup>1</sup>. Institutions formally constrain the actions (through laws, financial systems, incentive structures, normative pressures) of individuals who deviate too strongly from them (DiMaggio & Powell, 1983). Furthermore, institutions set the boundaries of what actions individuals consider to be rational in the first place (Powell & DiMaggio, 1991). This is not to suggest that actors are unable to exercise agency and pursue their interests within their institutional environment (see DiMaggio,

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<sup>1</sup> This definition of institution reflects the institutional tradition in Political Science—with an explicit focus on laws, incentives, and formal structures—more than the institutional tradition in organizational studies which focuses primarily on taken-for-granted cognitive scripts and meaning systems (see Hall & Taylor, 1996).

1988). Actors play an active role in the creation, maintenance, and disruption of institutions (Lawrence & Suddaby, 2006). While I make the assumption in this study that actors seek to pursue and advance their own interests<sup>2</sup> in a rational fashion (see Scharpf, 1997), I also acknowledge that the interests actors pursue are, themselves, institutionally defined (Powell & DiMaggio, 1991).

While an understanding of the relationship between institutions and CSP is still in its infancy (see Campbell, 2007), several studies have indicated that a relationship exists between the two (see Aguilera et al., 2007; Campbell, 2007; Gjølborg, 2009; Matten & Moon, 2008). First, a small body of literature has examined the role of regulative institutions (Scott, 2001) such as tax laws (Campbell, 2004; Navarro, 1988), fines and other penalties (Chatterji, Levine, & Toffel, 2009), and government regulations (Weaver, Treviño, & Cochran, 1999) in influencing CSR/CSP. A general insight of this group of studies is that formal rules such as laws, incentives, and sanctions coerce (or do not coerce) firms to pursue strong social and environmental performance (Campbell, 2007). A second larger body of literature has examined the relationship between normative institutions and CSP. These normative pressures are exerted in such forms as negative media coverage (Weaver et al., 1999; Bansal & Clelland, 2004) and global pressures towards social responsibility (Sharfman, Shaft, & Tihanyi, 2004). An insight of these studies is that strong normative pressures exerted by government, media, public opinion, and other companies make firms more likely to pursue social and environmental objectives (Campbell, 2007).

While the previous studies have examined the relationship between institutions and CSP in a single context, a recent body of literature has begun to examine the relationship between

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<sup>2</sup> Following Aguilera et al. (2007), I make the assumption in this study that the interests actors pursue can be instrumentally, relationally, or morally motivated.

institutions and CSP in a cross-national context (see Williams & Aguilera, 2008). Doh and Guay (2006) examine how institutional differences in Europe and the United States have led to differences in government policy, corporate political strategy, and the power of NGOs in these nations. These differences lead to variation in how firms approach social and environmental issues in their institutional environments (Doh & Guay, 2006). Cuesta Gonzalez and Valor Martinez (2004) demonstrate how government regulations across European countries foster CSP in these countries. They find that while certain aspects of CSP (e.g. labour rights) are embedded in the European institutional environment, certain gaps exist whereby firms can voluntarily pursue social and environmental objectives. More recently, Blasco and Zølner (2010) compare France and Mexico to demonstrate how historical factors and institutions mix to influence how firms approach social and environmental initiatives. In short, these bodies of literature call attention to the complex web of rules, historical and cultural factors, and norms which influence how firms perform on social and environmental dimensions.

### **2.3. The Varieties of Capitalism Approach**

The above studies demonstrate that national institutions appear to influence the way in which firms view their role in society and the actions they take to address social and environmental issues. Yet, these empirical studies have not addressed whether there is a pattern to this institutional variation and resultant CSP. However, a central feature of institutions, according to scholars of comparative institutional analysis, is that they tend to be complementary—that is, groups of complementary institutions tend to cluster together into identifiable groups. This feature is the hallmark of the Varieties of Capitalism approach (Hall & Soskice, 2001; Hall & Gingrich, 2009). Under this view, firms are the central actors in the

economy and nations tend to cluster together into two broad market economies - liberal market economies (LMEs) or coordinated market economies (CMEs) - based on how firms coordinate their activities. Firms in LMEs tend to coordinate their activities through competitive markets, with arms-length relations and formal contracting. In contrast, firms in CMEs tend to coordinate actions through strategic interaction with other actors and organizations (Hall & Soskice, 2001). Whether a firm coordinates activities through the market or through strategic interactions largely depends on the institutional context it is embedded within.

The institutional makeup of these economies is inextricably connected to the history and culture of the country in question. Institutions are often a reflection of the social, economic and political foundations of a particular country (Godard, 2004). In this way, institutions are both the result of actions and act as a guide for future actions (Godard, 2008). In LMEs (United States, Canada, United Kingdom, Ireland, Australia, New Zealand), firms face large equity markets and are financed primarily by stock markets with dispersed ownership. Furthermore, regulations do not prevent hostile takeovers, which lead managers to be particularly attuned to share price (Hall & Gingrich, 2009). Also, LMEs are characterized by low union density and employment protections, which results in fluid labour markets where wage setting is often conducted between workers and individual employers (Hall & Gingrich, 2009). These institutional conditions, it is argued, provide incentives for firms to coordinate their activities through market mechanisms. In CMEs (Germany, Sweden, Norway, Denmark, the Netherlands, Belgium, Austria, Japan), firms are financed primarily by a small number of large investors—many of which are banks—with significant cross-holdings between firms. This dense network of owners creates an environment where firms are able to access capital based on reputation, making share price less of a dominant

feature than in LMEs (Hall & Gingrich, 2009). Furthermore, CME are characterized by a comparatively high level of union representation. Also in CMEs, employees have other forms of representation such as works councils. This coupled with high levels of employment protections make labour markets in CMEs less fluid than in LMEs. Additionally, wage setting in CMEs is often coordinated by trade unions and employer associations (Hall & Soskice, 2001). These institutional conditions make firms in CMEs more likely to strategically coordinate their endeavours.

The differences between LMEs and CMEs are not in formal rules and structures alone. As VoC scholars argue, the differences between these economies extends to the realm of informal rules (Hall & Soskice, 2001: 12-13). These informal ‘rules of the game’ are “important elements of the ‘common knowledge’ that leads participants to coordinate on one outcome, rather than another, when both are feasible in the presence of a specific set of formal institutions” (2001: 13). For example, the formal institutional structures of Germany, in isolation, will not necessarily produce the German system of codetermination. However, the formal structures coupled with strong informal rules and meanings are what firmly entrenches the German system of codetermination (Streeck, 1997).

Although the VoC approach has been widely adopted in the literature (see Coates, 2005), it is often criticized for not paying adequate attention to variation that occurs *within* LMEs and CMEs (Gospel & Pendleton, 2003). For example, although the United Kingdom and the United States are both considered LMEs, they display considerable differences in terms of how they address social and environmental issues (Aguilera et al., 2006; Brammer & Pavelin, 2005). Even with this limitation, the VoC approach provides a useful application for scholars interested in

examining the relationship between institutions and CSP because it provides a general means to examine how national-institutions influence firm actions on a broad scale. For example, key variables in market economies, such as the level of coordination in corporate governance and labour relations, are likely to produce differences in both the *processes* firms adopt to address social and environmental issues and the *outcomes* of firm actions on these dimensions. These differences are likely to be (generally) observed in broad differences in CSP between CMEs and LMEs. Accordingly, in the following sections, I develop hypotheses around these variables predicting their relationships with social and environmental *processes* and *outcomes*.

## CHAPTER 3. HYPOTHESES

Although the VoC approach has traditionally focused on the implications of market economy for innovation and economic performance, its firm-centered focus also offers potentially useful implications for CSP as well (see Gjøølberg, 2009). In other words, it is possible to derive hypotheses predicting how national-level coordination in different areas and their underlying institutional arrangements will be related to CSP *processes* and *outcomes* (Gjøølberg, 2009). In this section, I derive a general hypothesis predicting the relationship between market economy and CSP *processes* and *outcomes*. Additionally, I derive more specific hypotheses focusing on the relationship between specific variables within market economies (i.e. coordination in corporate governance and labour relations) and CSP *processes* and *outcomes*.

### 3.1. Market Economy

The VoC framework demonstrates how differences in firm coordination lead to different actions on the parts of firms based in LMEs and CMEs (Hall & Soskice, 2001). Recently, scholars have begun to address the question as to how market economy and corresponding institutions may influence how firms address social and environmental issues (Aguilera et al., 2007; Campbell, 2007; Gjøølberg, 2009; Matten & Moon, 2008). In general, these scholars infer that firms in CMEs are more likely to have a strong performance on social and environmental dimensions than firms in LMEs. The rationale behind this is that the institutional environment of CMEs has social and environmental objectives embedded within it in the form of strong state and self-regulations operating on firms (Cuesta Gonzalez & Valor Martinez, 2004; Campbell, 2007), strong welfare states promoting social and environmental issues (Gjøølberg, 2009), and a political culture which pressures firms to engage in CSP (Aguilera et al., 2007; Gjøølberg, 2009).

Furthermore, as will be discussed further below, differences between LMEs and CMEs with regards to how labour relations and corporate governance are coordinated also likely produce differences in CSP. Overall, the institutional conditions of CMEs tend to foster a system of ‘stakeholder’ capitalism whereby firms address a broad range of stakeholder issues (Gjølberg, 2009). In LMEs, the institutional conditions foster a broader system of ‘shareholder’ capitalism (Morris, Hassard, & McCann, 2008) whereby firms seek to maximize returns for shareholders. This is not to suggest that all firms in LMEs do not perform well on social and environmental dimensions. As has been demonstrated in many studies, selected firms in LMEs have a long history of a strong CSP (see Frederick, 2006). However, I am arguing that, in general, the institutional structure of LMEs is less likely to facilitate a strong minimum performance on social and environmental dimensions than the institutional structure of CMEs. For these reasons, we should expect firms in CMEs, on average, to have a higher performance than firms in LMEs on social and environmental *processes* and *outcomes*.

Hypothesis 1a: Firms in CMEs will perform higher on social *processes* than firms in LMEs

Hypothesis 1b: Firms in CMEs will perform higher on social *outcomes* than firms in LMEs

Hypothesis 1c: Firms in CMEs will perform higher on environmental *processes* than firms in LMEs

Hypothesis 1d: Firms in CMEs will perform higher on environmental *outcomes* than firms in LMEs

### **3.2. Corporate Governance**

Corporate governance arrangements – including ownership structure and financing arrangements – are a central feature of the VoC approach. Scholars argue that business systems within countries differ considerably in terms of the extent to which corporate governance is coordinated by firms and other organizations<sup>3</sup> (Hall & Soskice, 2001). In LMEs, ownership is relatively dispersed and is primarily concerned with short-term returns. In addition, there are active markets for corporate control, flexible labour markets, strong rights for shareholders, and arms-length financing through equity (Aguilera & Jackson, 2003). In contrast, firms in CMEs have weaker markets for corporate control, inflexible labour markets, a small network of large blockholders with significant cross-holdings, and receive long-term debt financing (Aguilera & Jackson, 2003).

These differences in corporate governance arrangements between LMEs and CMEs have two major implications for how firms perform on social and environmental dimensions. First, coordination in corporate governance influences the time horizon that firms adopt (Hall & Soskice, 2001). For example, low coordination in corporate governance suggests that firms receive financing from a widely dispersed stock market. The stock market puts considerable pressure on firms for short-term returns. Thus, firms in these countries are likely to adopt a short-

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<sup>3</sup> The VoC approach roughly follows the separation of the Anglo-American and the Continental model of corporate governance that is made in the comparative corporate governance literature (Aguilera & Jackson, 2003).

term orientation, whereby the focus is on short-term economic objectives (Hall & Soskice, 2001). In contrast, high coordination in corporate governance suggests a smaller network of larger owners – many of which are banks – with significant cross-holdings between firms. In this setting, owners are less concerned with short-term objectives and instead tend to focus on the long-term stability and growth of the organization (Fiss & Zajac, 2004). Thus, firms in CMEs are more likely to have a long-term orientation, while firms in LMEs are more likely to have a short-term orientation.

The time orientation of a firm (short-term or long-term) has considerable implications for the environmental dimension of CSP in that the pursuit of environmental objectives is said to require substantial deviations from short-term economic objectives (Bansal, 2005; Hart, 1995). Because the pursuit of environmental objectives often requires a complete retooling of firm operations, it may be costly for the organization in the short-term (Hart, 1995). For example, Hart (1995) argues that while pursuit of sustainable development strategies might be beneficial for the firm, it requires a long-term commitment to market development. Hart further argues that “there is little reason to believe that this investment will result in enhanced short-term profits” (1995: 998). Furthermore, in their study of Japanese firms (a CME), Bansal and Roth (2000) argue that the ecological responsiveness observed in these firms is attributable to their long-term orientation. Thus, we would expect that firms in countries where there are higher levels of coordination in corporate governance (and thus a long-term orientation) would demonstrate higher levels of environmental *processes* and *outcomes*.

Hypothesis 2a: Coordination in corporate governance will be positively

associated with environmental *processes*

Hypothesis 2b: Coordination in corporate governance will be positively associated with environmental *outcomes*

A second implication of coordination in corporate governance pertains to whose interests the firm ultimately serves (Aguilera & Jackson, 2003). Low coordination in corporate governance is more likely to reflect a ‘shareholder value’ focus, whereby the primary objective of the firm is to serve the interests of shareholders (Hall & Soskice, 2001). Conversely, high coordination in corporate governance tends to foster a stakeholder focus. For example, the large blockholders and banks, which are the primary owners of firms in CMEs, have historically functioned primarily as social institutions (Godard, 2008). Because of this, firms in these countries have been more likely to consider the interests of multiple stakeholders rather than focus solely on maximizing shareholder value (Vitols, 2001).

In this way, coordination in corporate governance also has implications for the *social* dimension of CSP. As coordination in corporate governance increases, owners are more likely to function as social institutions rather than solely economic institutions. In these countries, firms are more likely to consider the needs of multiple stakeholders (employees, suppliers, customers) in decision making. For these reasons, we can expect coordination in corporate governance to be positively associated with social *processes* and *outcomes*. Thus:

Hypothesis 2c: Coordination in corporate governance will be positively

associated with social *processes*

Hypothesis 2d: Coordination in corporate governance will be positively associated with social *outcomes*

### **3.3. Labour Relations**

A second central feature of the VoC approach concerns the level of coordination in labour relations at the national-level (Hall & Gingrich, 2009). As these scholars indicate, CMEs tend to set wages through industry-level bargaining between unions and employer associations. Trade unions tend to be powerful enough in CMEs to ensure a level playing field with employer associations (Hall & Soskice, 2001: 24-25). This coordination in wage setting results in the equalization of wages at equivalent skill levels which “makes it difficult for firms to poach workers and assures the latter (employees) they are receiving the highest feasible rates of pay in return for the deep commitment they are making to firms” (Hall & Soskice, 2001: 25). This coordination in labour relations is complemented at the firm-level by works councils “composed of elected employee representatives endowed with considerable authority over layoffs and working conditions” (2001: 25). In contrast, LMEs are characterized by individual contracts between employers and employees to determine wages. In these countries, managers have considerable decision-making authority with regard to hiring and firing (Hall & Soskice, 2001). Furthermore, unions tend to be comparatively less powerful in LMEs and firms are not required to create groups representing workers such as works councils. In these economies there are fewer incentives to pursue long-term strategies with regards to employees, and instead firms are

more likely to hire employees based on their need at a particular moment in time (Hall & Soskice, 2001).

National-level coordination (of lack thereof) in labour relations leads to important differences in the way firms interact with employees and other stakeholders (Hall & Soskice, 2001). Firms in CMEs tend to engage in institutionalized dialogue with employees through unions, works councils, and other employee groups. This is likely to influence the social dimension of CSP in two ways. First, it is likely to give employees a more active voice in corporate policy by providing a formal means to include the interests of employees in corporate strategies (Campbell, 2007). Second, in addition to giving employees a more active role in the firm's decisions, institutionalized dialogue between firms and employees also may work to influence how managers view their own interests. As indicated by Streeck (1997), managers in Germany were initially hesitant about adopting a system of codetermination whereby employees participated in corporate strategy; however, managers eventually started to believe that this system was beneficial for long-term stability and competitiveness because it facilitated a higher level of cooperation between management and employees. In LMEs, there is less institutional support for firms to engage in institutionalized dialogue with employees and other stakeholders. This is not to say that firms in LMEs do not perform well on social dimensions of CSP. Even though firms do not have formal dialogue with employees, they may still have strong instrumental (competitive advantage), relational (social legitimacy), and moral (stewardship) motives for pursuing social initiatives (Aguilera et al., 2007). However, these strategies are likely to vary on a firm to firm basis in LMEs, whereas firms in CMEs are more likely to have an overall stable and strong performance on social dimensions. Thus, we can say:

Hypothesis 3a: Coordination of national labour relations will be positively associated with social *processes*

Hypothesis 3b: Coordination of national labour relations will be positively associated with social *outcomes*

## CHAPTER 4. METHODS

### 4.1. Sample and Analysis

The sample of firms was drawn from the Canadian Social Investment Database (CSID). While still considered a relatively new database, studies seeking third-party ratings of CSP have increasingly turned to this database (e.g. Boutin-Dufresne & Savaria, 2004; Mahoney & Roberts, 2004; Mahoney & Throne, 2005). The sample consisted of 1551 publically traded firms from 20 countries<sup>4</sup> (See Table 1). Of these 1551 firms, 899 were based in LMEs, 514 were based in CMEs, and 138 were based in market economies which could not be classified as a LME or a CME. The sample firms represented a diverse range of industries (See Table 2). The data obtained was for the year 2010. Hypotheses were tested using ordinary least squares (OLS) regression.

The CSID is a useful database for CSP studies for a number of reasons. First, it reduces the largely subjective nature of CSP measures such as firm self-presentations (e.g. Maignan and Ralston, 2002). Instead, it offers a third-party CSP measurement of CSP which is less likely to have the explicit biases of self-reports (Johnson and Greening, 1999). Second, it does not limit the concept of CSP to a one-dimensional index, but rather separates dimensions of performance. The CSID rates firms on 148 different governance, social, and environmental dimensions. This feature allows firms to be rated on each dimension to determine a more comprehensive measurement of CSP (Griffin and Mahon, 1997; Johnson and Greening, 1999). This prevents a problem that is common in one-dimensional measures of CSP where a firm might score quite high on one dimension of CSP (charitable contributions), but low on another dimension

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<sup>4</sup> Every firm listed in the database from the 20 countries measured was included in the sample.

(environmental) (Campbell, 2007). Under a one-dimensional index, although a firm may appear to score average overall, this may reflect a cancelling out effect of a high score on one dimension and a low score on another dimension. However, when CSP dimensions are measured separately, performance can be assessed on individual dimensions giving a more accurate and nuanced measurement of overall CSP. Finally, another benefit of the CSID is that its ratings are cross-national. This allows researchers to compare the CSP of firms in different countries using a consistent rating scale. For these reasons, the CSID was an appropriate choice for this study.

**Table #1 – Number of Firms by Country and Market Economy**

<b>Country</b>	<b>Number of Firms</b>	<b>Market Economy</b>
Australia	68	LME
Austria	9	CME
Belgium	13	CME
Canada	121	LME
Denmark	12	CME
Finland	17	CME
France	71	Neither
Germany	44	CME
Ireland	4	LME
Italy	31	Neither
Japan	333	CME
Netherlands	19	CME
New Zealand	5	LME
Norway	8	CME
Portugal	8	Neither
Spain	28	Neither
Sweden	26	CME
Switzerland	33	CME
United Kingdom	95	LME
United States	606	LME

**Table #2 – Number of Firms by Industry**

<b>Industry</b>	<b>Number in Sample</b>
Basic Materials	182
Conglomerates	132
Consumer Goods	315
Financial	160
Health Care	118
Industrial Goods	223
Services	195
Technology	141
Utilities	85

## 4.2. Measures

**4.2.1. CSP Processes and Outcomes.** To obtain measures of firm performance on CSP *processes* and CSP *outcomes* a number of steps were performed. First, each of the 148 governance<sup>5</sup>, social, and environmental criteria used in the CSID ratings were examined and, following Wood (1991), separated into categories based on whether they constituted *processes* or *outcomes*. Second, the score was further filtered to only include the social and environmental dimensions that were common to all industries. This was done to ensure that scores did not consist of differing dimensions based on what factors were applicable to that particular firm. For example, certain dimensions (e.g. water intensity) were present for certain industries (e.g. basic materials) and not for others (e.g. financial). To ensure that scores were uniform across industries it was necessary to include only dimensions that were common to all industries. A list of these dimensions is provided in Appendix A. The final measure of *processes* consisted of 7 *social* and 8 *environmental* dimensions. The final measure of *outcomes* consisted of 8 *social* and 7 *environmental* dimensions<sup>6</sup>.

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<sup>5</sup> The ‘governance’ dimension was not included in the analysis because it focused primarily on corporate governance composition and structure. Following other studies of CSP (Gjølberg, 2009), I chose to focus solely on social and environmental dimensions leaving governance structure for scholars of comparative corporate governance (e.g. Aguilera & Jackson, 2003).

<sup>6</sup> All dimensions were assigned equal weighting.

**4.2.2. Independent Variables.** The two continuous independent variables (labour relations and corporate governance) were obtained from a recent empirical paper by Hall and Gingrich (2009) in which they constructed indices of coordination in these two areas. The index assessing coordination in corporate governance was composed of three factors: shareholder power, dispersion of control, and size of the stock market (Hall & Gingrich, 2009). Shareholder power “reflects the legal protection and likely-influence over firms or ordinary shareholders relative to managers or dominant shareholder” (2009: 455). Dispersion of control “indicates how many firms in the economy are widely held relative to the number of controlling shareholders” (2009: 455). Size the stock-market refers to “the market valuation of equities on the stock exchanges of a nation as a percentage of its GDP in 1993” (2009: 455). Based on these three factors, a score between zero and one was calculated indicating the level of coordination with regards to corporate governance at the national-level. A low score indicates little coordination (likely LMEs) and a high score indicates a high level of coordination (likely CMEs).

The index assessing coordination in national labour relations was also comprised of three factors: level of wage coordination, degree of wage coordination, and labour turnover. Level of wage coordination indicates “the level at which unions normally coordinate wage claims and employers coordinate wage offers” (2009: 455). The degree of wage coordination indicates “the estimates by the OECD Secretariat of the degree to which wage bargaining is (strategically) coordinated by unions and employers” (2009: 455). Labour turnover “is an indicator of the fluidity of national labour markets and reports the number of employees what had held their jobs for less than one year as a percentage of all employees surveyed in 1995” (2009: 455). Similar to the corporate governance index, a score between zero and one was given indicating the level

of national-level coordination in labour relations. Low scores indicate weak coordination and high scores indicate strong coordination in labour relations.

Finally, to determine the market economy of the countries being analyzed, I followed Hall and Soskice's (2001) categorization used in their volume on the varieties of capitalism. Based on this categorization, six countries were classified as LMEs, 10 countries were classified as CMEs, and 4 countries were classified as neither LME nor CME.

**4.2.3. Control Variables.** When doing comparative institutional analysis, it is important to statistically control for cultural differences between countries to ensure that the hypothesized differences between them are not a reflection of cultural differences (see Ringov & Zollo, 2007). Culture differs from institutions in that culture is more intangible than institutions (Hall & Thelen, 2009). Indeed, while culture is often persistent over time, institutions are more readily created, maintained, and disrupted (Lawrence & Suddaby, 2006). In this study, I controlled for cultural differences between countries using Hofstede's (1980) cultural dimensions of individualism, power distance, uncertainty avoidance, and masculinity. While Hofstede's framework is not without its limitations (see McSweeney, 2002), it continues to be widely used in the literature (see Kirkman, et al., 2006). In addition to cultural dimensions, I also provided statistical controls for industry to ensure that a disproportionately large number of firms in a certain industry in one country did not influence the effect of the independent variables on the dependent variables.

## CHAPTER 5. RESULTS

Table 3 provides the means, standard deviations, and correlations for all continuous variables tested in the study. Table 4 provides the mean scores – separated by country - for all dependent variables measured in the study. The independent variables were regressed on each dependent variable (*social processes*, *social outcomes*, *environmental processes*, *social outcomes*) in separate models. The regressions were carried out in a series of steps. In the first step, all control variables were entered into the model. In each subsequent step, an additional predictor variable was entered into the model. This approach provided the ability to observe changes in R<sup>2</sup> as new variables were introduced into the model.

**Table #3 – Descriptive Statistics for Continuous Variables**

Variable	Mean	s.d.	1	2	3	4	5	6	7	8	9
1. Social Processes	10.80	7.12									
2. Social Outcomes	21.78	2.46	.19**								
3. Environmental Processes	9.13	6.84	.50**	.21**							
4. Environmental Outcomes	24.93	2.63	-.00	.02	.05*						
5. Labour Relations Coordination	.36	.40	.03	.13**	.46**	.11**					
6. Corporate Gov. Coordination	.37	.35	.11**	.19**	.43**	.12**	.94**				
7. Individualism	75.42	18.31	.03	-.14**	-.46**	-.09**	-.93**	-.82**			
8. Power Distance	43.57	9.83	.03	.12**	.29**	-.01	.53**	.50**	-.59**		
9. Masculinity	60.11	21.17	-.20**	-.08**	.22**	.00	.44**	.17**	-.52**	.38**	
10. Uncertainty Avoidance	64.63	20.07	.02	.12**	.40**	.05*	.86**	.76**	-.89**	.83**	.58**

\* p< .05

\*\* p< .001

**Table #4 – Country Average CSP Scores**

Country	Market Economy	Social Processes	Social Outcomes	Environmental Processes	Environmental Outcomes
Australia	LME	9.31	20.82	6.69	24.73
Austria	CME	7.67	22.23	8.23	25.53
Belgium	CME	13.46	21.28	10.33	26.59
Canada	LME	7.98	21.68	6.24	24.38
Denmark	CME	12.50	22.19	10.54	25.71
Finland	CME	15.41	22.14	12.40	26.20
France	Neither	15.81	22.90	11.79	24.87
Germany	CME	15.67	22.77	11.58	25.44
Ireland	LME	5.06	21.15	8.62	25.06
Italy	Neither	14.02	23.63	8.45	25.63
Japan	CME	8.83	21.73	14.27	25.12
Netherlands	CME	17.92	21.88	11.42	26.03
New Zealand	LME	5.95	22.54	7.28	28.81
Norway	CME	12.50	22.69	8.57	25.33
Portugal	Neither	13.25	25.45	11.41	25.74
Spain	Neither	16.80	25.89	14.07	24.75
Sweden	CME	15.25	22.52	11.85	25.73
Switzerland	CME	11.44	20.99	9.78	26.36
United Kingdom	LME	14.37	22.20	11.28	25.85
United States	LME	10.08	21.31	5.77	24.47

### 5.1. Market Economy

Hypotheses 1a, 1b, 1c, and 1d predicted that coordinated market economies would perform higher than liberal market economies on social and environmental *processes* and *outcomes*. The results are presented in table 5. As table 5 indicates, firms in CMEs performed higher than firms in LMEs on social processes ( $\beta = 6.40$ ), environmental processes ( $\beta = 4.84$ ), and environmental outcomes ( $\beta = 1.29$ ). These results were significant at  $p < .001$  and were considerably larger than the effect sizes of the cultural and industry controls. Surprisingly, there was no relationship found between firms in CMEs and LMEs on social *outcomes* ( $\beta = -.42$ ). In this case, industry was a stronger predictor of social *outcomes* than market economy. Thus, support was provided for hypothesis 1a, 1c, and 1d, but not 1b.

**Table #5 – Market Economy Regressed on CSP Processes and Outcomes**

Variables	<u>Social</u>				<u>Environmental</u>			
	Processes		Outcomes		Processes		Outcomes	
	<u>Model 1</u>		<u>Model 2</u>		<u>Model 3</u>		<u>Model 4</u>	
	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>
Constant	6.34	3.39	27.75	1.13	19.61	2.88	25.38	1.32
<i>Cultural Controls</i>								
Individualism	.07*	.03	-.05**	.01	-.15**	.03	.00	.01
Power Distance	.08	.05	-.02	.02	.16**	.04	-.02	.02
Masculinity	-.01	.02	-.01	.01	.04*	.01	.01	.01
Uncertainty Avoidance	-.12*	.04	-.02	.01	-.16**	-.03	-.01	.02
<i>Industry Controls</i>								
Conglomerates	-1.24	.78	-.01	.26	-3.08**	.67	.34	.30
Consumer Goods	2.22*	.64	.47*	.21	-1.47*	.54	.37	.25
Financial	-.32	.74	-.77*	.25	-4.68**	.63	.42	.29
Health Care	.47	.81	1.13**	.27	-2.45**	.69	.16	.31
Industrial Goods	-.02	.69	.39	.23	.92	.58	.17	.27
Services	.64	.70	1.03**	.23	-1.59*	.59	.12	.27
Technology	1.27	.77	.74*	.26	-.26	.65	.19	.30
Utilities	3.0*	.89	2.65**	.30	3.05**	.76	.02	.35
<i>Market Economy<sup>7</sup></i>								
CME	<b>6.40**</b>	<b>.96</b>	<b>-.42</b>	<b>.32</b>	<b>4.84**</b>	<b>.81</b>	<b>1.29**</b>	<b>.37</b>
Neither	<b>9.36**</b>	<b>1.21</b>	<b>2.23**</b>	<b>.40</b>	<b>4.90**</b>	<b>1.03</b>	<b>1.46*</b>	<b>.47</b>
R <sup>2</sup>	.12		.18		.31		.03	
F	15.1		24.50		49.80		3.22	

\* p < .05

\*\* p < .001

## 5.2. Coordination in Corporate Governance and Labour Relations

Hypothesis 2a predicted that coordination in corporate governance would be positively associated with environmental *processes*. The results of the regression are presented in Table 6. As indicated in this table, after controlling for cultural effects and industry effects, coordination in corporate governance was positively associated with environmental processes ( $\beta = 7.68$ ). This result was significant at  $p < .001$  ( $R^2 = .32$ ,  $F = 51.69$ ). In addition to being significant, the effect size of the independent variable was considerably larger than that of the cultural controls. Thus, support was provided for hypothesis 2a.

<sup>7</sup> LME was used as the reference group for the market economy variable in every regression.

**Table #6 – Coordination in Corporate Governance and Labour Relations  
Regressed on Environmental Processes**

Variables	Model 1		Model 2	
	<i>b</i>	s.e.	<i>b</i>	s.e.
Constant	27.38	2.38	20.79	2.49
<i>Cultural Controls</i>				
Individualism	-.26**	.02	-.18**	.02
Power Distance	.10*	.04	.24**	.04
Masculinity	-.00	.01	.07**	.01
Uncertainty Avoidance	-.08*	.03	-.24**	.04
<i>Industry Controls</i>				
Conglomerates	-2.65**	.66	-2.81**	.65
Consumer Goods	-.87	.54	-1.16*	.53
Financial	-4.14	.63	-4.34**	.62
Health Care	-1.72*	.68	-1.72*	.67
Industrial Goods	1.56*	.58	1.51*	.57
Services	-1.13	.60	-1.29*	.59
Technology	.25	.65	.37	.64
Utilities	3.50**	.76	3.54**	.75
<i>Hypothesized Variables</i>				
Corporate Governance Coordination			<b>7.74**</b>	<b>1.03</b>
R <sup>2</sup>	.30		.31	
F	53.71		55.70	
Δ R <sup>2</sup>	NA		.03	
F for Δ R <sup>2</sup>	NA		56.32**	

\* p<. 05

\*\* p< .001

Hypothesis 2b predicted that coordination in corporate governance at the national-level would be positively associated with environmental *outcomes*. Table 7 presents the results of this regression. As indicated in the table, coordination in corporate governance was found to be positively associated with environmental outcomes ( $\beta = 1.49$ ). This result was significant at  $p < .05$  ( $R^2 = .02$ ,  $F = 2.99$ ). Thus, support was provided for hypothesis 2b; however, the amount of variation explained was comparatively small compared to the previous hypothesis.

**Table #7 – Coordination in Corporate Governance Regressed on  
Environmental Outcomes**

Variables	Model 1		Model 2	
	<i>b</i>	s.e.	<i>b</i>	s.e.
Constant	27.32	1.08	26.02	1.15
<i>Cultural Controls</i>				
Individualism	-.02	.01	-.01	.01
Power Distance	-.04*	.02	-.01	.02
Masculinity	-.01*	.00	.00	.01
Uncertainty Avoidance	.01	.01	-.02	.02
<i>Industry Controls</i>				
Conglomerates	.46	.30	.42	.30
Consumer Goods	.54*	.25	.50*	.25
Financial	.57*	.29	.53	.28
Health Care	.36	.31	.36	.31
Industrial Goods	.34	.26	.33	.26
Services	.25	.27	.22	.27
Technology	.33	.30	.35	.30
Utilities	.15	.35	.16	.34
<i>Hypothesized Variables</i>				
Corporate Governance Coordination			<b>1.53**</b>	<b>.48</b>
R <sup>2</sup>		.01		.02
F		2.60		3.20
Δ R <sup>2</sup>		NA		.01
F for Δ R <sup>2</sup>		NA		10.33**

\* p<. 05

\*\* p< .001

Hypothesis 2c and 2d made similar predictions pertaining to social *processes* and *outcomes*. The results of hypothesis 2c, predicating a positive association between coordination in corporate governance and social *processes*, are presented in Table 8. The results indicated that coordination in corporate governance was positively associated with social *processes* ( $\beta = 9.01$ ). This result was significant at  $p < .001$  ( $R^2 = .11$ ,  $F = 13.52$ ). Thus, support was provided for hypothesis 2c. The results of hypothesis 2d - predicating a positive association between

coordination in corporate governance and social *outcomes* – are presented in table 9. Again, the effect size ( $\beta = 5.13$ ) was significant at  $p < .001$  ( $R^2 = .18$ ,  $F = 23.26$ ). Thus, support was provided for hypothesis 2d.

**Table #8 – Coordination in Corporate Governance and Labour Relations  
Regressed on Social *Processes***

Variables	Model 1		Model 2		Model 3		Model 4	
	<i>b</i>	s.e.	<i>b</i>	s.e.	<i>b</i>	s.e.	<i>b</i>	s.e.
Constant	13.9	2.82	5.16	3.20	6.89	2.97	7.35	3.24
<i>Cultural Controls</i>								
Individualism	-.02	.03	.07*	.03	.03	.03	.02	.03
Power Distance	.05	.04	.18**	.05	.20**	.05	.20**	.05
Masculinity	-.10**	.01	-.08**	.01	-.03	.02	-.02	.02
Uncertainty Avoidance	.02	.04	-.11**	.04	-.16**	.04	-.16**	.04
<i>Industry Controls</i>								
Conglomerates	-.63	.79	-.97	.78	-.01	.78	-.78	.78
Consumer Goods	3.07**	.64	2.70**	.64	2.86**	.63	2.89**	.64
Financial	.52	.75	.25	.74	.30	.74	.32	.74
Health Care	1.47	.81	1.17	.81	1.47	.80	1.51	.81
Industrial Goods	.78	.69	.36	.69	.72	.68	.77	.69
Services	1.35	.71	1.12	.70	1.19	.70	1.20	.70
Technology	1.90**	.78	1.66**	.77	2.02*	.77	2.06*	.78
Utilities	3.79**	.90	3.72**	.89	3.82**	.89	3.83**	.89
<i>Hypothesized Variables</i>								
Labour Relations			<b>7.94**</b>	<b>1.41</b>	-	-	<b>-1.02</b>	<b>2.81</b>
Coordination								
Corporate Governance					<b>8.31**</b>	<b>1.23</b>	<b>9.01**</b>	<b>2.47</b>
Coordination								
R <sup>2</sup>	.08		.10		.10		.11	
F	11.63		13.41		14.56		13.52	
$\Delta R^2$	NA		.02		.03		.008	
F for $\Delta R^2$	NA		31.92**		45.64**		13.56**	

\*  $p < .05$

\*\*  $p < .001$

Hypothesis 3a and 3b predicted that coordination in labour relations would be positively associated with social *processes* and social *outcomes*, respectively. The results of the regression testing hypothesis 3a are presented in table 8. As indicated in model 2 of this table, coordination in labour relations was found to be positively associated ( $\beta = 7.94$ ) with social *processes*;

however, once coordination in corporate governance was added to the model (see model 3), the effect of labour relations on social *processes* diminished ( $\beta = -1.02$ ). In other words, the regression indicates that it was coordination in corporate governance that is more likely to predict the presence of social *processes* than coordination in labour relations. Similarly, coordination in labour relations did not produce a significant effect on social *outcomes*. These results are displayed in table 9. As seen in model 1 in the table, coordination in labour relations had little effect on social *outcomes* ( $\beta = -.02$ ) in comparison to certain cultural and industry controls. Thus, hypotheses 3a and 3b were not supported.

**Table #9 – Coordination in Corporate Governance and Labour Relations  
Regressed on Social *Outcomes***

Variables	Model 1		Model 2		Model 3	
	<i>b</i>	s.e.	<i>b</i>	s.e.	<i>b</i>	s.e.
Constant	24.63	.94	24.66	1.08	25.99	1.08
<i>Cultural Controls</i>						
Individualism	-.03**	.01	-.03*	.01	-.06**	.01
Power Distance	.03	.01	.03	.02	.03*	.02
Masculinity	-.03**	.00	-.03**	.00	.01	.01
Uncertainty Avoidance	-.01	.01	-.01	.01	-.03*	.01
<i>Industry Controls</i>						
Conglomerates	-.02	.26	-.02	.26	.10	.26
Consumer Goods	.46*	.21	.46*	.22	.58*	.21
Financial	-.71*	.25	-.71*	.25	-.67*	.25
Health Care	1.10**	.24	1.11**	.27	1.32**	.27
Industrial Goods	.28	.23	.29	.23	.53*	.23
Services	1.09**	.24	1.09**	.24	1.14**	.23
Technology	.69*	.26	.70*	.26	.934**	.26
Utilities	2.83**	.30	2.83**	.30	2.90**	.30
<i>Hypothesized Variables</i>						
Labour Relations			-.02	.47	-5.46**	.93
Coordination						
Corporate Governance					5.51**	.82
Coordination						
R <sup>2</sup>	.15		.14		.17	
F	22.28		20.55		22.85	
$\Delta R^2$	NA		.00		.02	
F for $\Delta R^2$	NA		.00		45.12**	

\* p<. 05

\*\* p< .001

To summarize, firms in CMEs performed (statistically) significantly higher than firms in LMEs on every CSP dimension except for social *outcomes*. The results indicated that it is coordination in corporate governance at the national-level that predicted CSP more so than coordination in labour relations.

### **5.3. Diagnostic Tests**

**5.3.1. *Outliers and Influential Data*** - To address possible outliers and influential data, a number of diagnostics were performed. I first examined histograms displaying the standardized and studentized residuals (see Appendix B). These revealed a relatively normal distribution for both the standardized and studentized residuals; however, there was slight flaring at both of the tails. This indicated minor outliers where firms performed either higher or lower than predicted. The average minimum standardized residual was -4.37 while the maximum was 3.52 for all dependent variables. These values indicated that the size of the outliers, while noteworthy, was not particularly problematic. Second, I examined the leverage to gain an understanding of the influence of the outlying cases. After examining the cases with a leverage value over .02 (i.e.  $(2k + 2)/n$ ), there appeared to be no outlying cases that exhibited an unusual amount of influence over the regression. To further address possible influential data, I examined the Cook's distance. The mean Cook's distance (.001) fell below the cut-off point ( $4/n = .003$ ) inferring that there are no particular cases that drastically influence the slope of the regression. In sum, diagnostics addressing outliers and influential data indicated a relatively normal distribution of data. The outliers that occur in the data appear to reflect the fact that firms – particularly in LMEs – may display considerable variation in CSP.

**5.3.2. Non-Constant Error Variance** - To ensure that the variance of the residuals was homogenous across levels of the predicted values, I examined scatterplots of the regression predicted values against the residual values. This was done for both standardized and non-standardized values. Visual inspection of these scatterplots revealed no identifiable non-constant error variance.

**5.3.3. Collinearity** - Finally, to address issues of collinearity, I examined the correlations, the variance inflation factors (VIFS), and the tolerance for all hypothesized variables. Issues of collinearity are of particular interest in this study since both continuous variables (coordination in corporate governance and labour relations) are likely to be highly correlated, since both are key distinguishing features of market economies (Hall & Soskice, 2001). Indeed, examinations of the correlations gave an indication of a strong association between these two variables (.935). Although this correlation is high, the other collinearity diagnostic tests suggested that this high correlation did not create an overly problematic collinear relationship between the variables. For example, the highest VIF value (8.0) fell below the critical point of 10. Furthermore, the tolerance values also suggested that collinearity may be within reason with a value (.125) above the critical point of 0. Finally, to check for possible autocorrelation in the data, I examined the Durbin-Watson statistic. This value, which ranges between 0 and 4, detects if there is a possible serial correlation between variables in panel data. Values close to 2 indicate no autocorrelation. For each regression, the statistic observed (1.63, 1.45, 1.53, 1.92) indicated that there is no serious concerns pertaining to autocorrelation. Thus, the evidence suggested that while the two main independent variables are strongly correlated, collinearity was not a serious problem in the study.

## CHAPTER 6. DISCUSSION

### 6.1. National-Level Institutions as Drivers of CSP

In this study, I set out to test the relationships between key national-level institutional variables suggested by the varieties of capitalism literature and different categories (*processes* and *outcomes*) and dimensions (social and environmental) of CSP. The results indicated that the institutional structures of LMEs and CMEs tend to produce differences in firm performance on both social and environmental dimensions. Thus, this study lends empirical support to other studies which have argued that the institutional structures of LMEs and CMEs lead to differences in national-level CSP (Gjølberg, 2009; Matten & Moon, 2008). Specifically, these results highlight the importance of national-level institutions in determining whether firms adopt particular *processes* aimed at addressing social and environmental issues and the overall impacts and *outcomes* of their actions on the broader society and natural environment. This study also supports the notion that institutional differences might play a larger role in explaining cross-national differences in CSP than cultural differences between nations. As the results of this study showed, national-level institutions were considerably stronger predictors of CSP than cultural factors. This is not to say that cultural dimensions are not important. On the contrary, norms and traditions within different societies often play a significant role in the formation of institutions in the environment (Hall & Soskice, 2001). However, cultural differences alone appear to be insufficient in explaining cross-national differences in CSP. Rather CSP at the national-level appears to be a reflection of a complex web of formal and informal rules and business system which are shaped by the specific historical foundations of individual countries.

While other bodies of research have provided accounts of how top managers (Swanson,

2008), shareholders (Kurtz, 2008), and consumers (Davis, 2008) drive CSP, these studies focus on variation in CSP that result from the actions of individual or groups of actors and downplay the importance of rules, laws, and incentives (Campbell, 2007). In contrast, this study has sought to demonstrate that institutions do indeed ‘matter’, and may more adequately explain widespread variation in CSP between nations than existing accounts offered in the literature. In this way, this study has broader implications for the structure/agency discussion in business and society research and organization studies in general (see Reed, 2003). While agency-related variables such as the discretion of managers, shareholders, consumers do play a role in influencing CSP, these actors are embedded in a broader system of institutions which both formally and informally influences their actions, behaviours, and values towards business and society (Doh & Guay, 2006). This influence can be observed in cross-national differences in CSP.

Interestingly, the direction of the relationships between the hypothesized variables remained consistent for both social and environmental *processes* and *outcomes*. However, the results indicated that the independent variables were stronger predictors of social and environmental *processes* than *outcomes*. This finding both supports the notion that CSP should be treated as a multidimensional construct (Rowley & Berman, 2000) and demonstrates the powerful role of institutions in influencing the *processes* that firms adopt to address social and environmental issues and the *outcomes* and impacts of firm actions on these dimensions (Campbell, 2007).

## **6.2. Corporate Governance and CSP**

The strong association between national-level coordination in corporate governance and CSP lends support to the work of other scholars who have highlighted the importance of

corporate governance in influencing firm performance on social and environmental dimensions (Aguilera, et al., 2006; Matten & Moon, 2008). The focus in this study on coordination in corporate governance provides a unique contribution to the corporate governance and CSP literature in that it moves beyond research examining the relationship between board composition and CSP (see Buchholtz, et al., 2008) and instead focuses on how differences in coordination provide firms (and boards) with different incentives and constraints in terms of acquiring resources (e.g. capital) and pursuing specific strategies.

The importance of coordination in corporate governance for CSP perhaps stems from the fact that it both shapes the time horizon adopted by firms and whose interests firms serve. With regards to time orientation, a firm's ability to adopt a long-term orientation may allow firms to address various social and environmental issues that may not have been possible in environments where corporate governance arrangements do not allow deviations from short-term economic objectives. Many business and society scholars have argued that the pursuit of social and environmental objectives has many benefits for the firm including cost savings (e.g. through energy conservation), increased legitimacy, and improved reputation (see Kurucz, Colbert, & Wheeler, 2008). However, these long-term benefits may require deviations from short-term returns (Hart, 1995). Thus, firms embedded in environments which facilitate short-termism may face considerable challenges when seeking to address these issues.

Additionally, facilitating the consideration of the interests of stakeholders beyond shareholders is another means by which coordination in corporate governance might work to positively influence CSP (Aguilera et al., 2006). In highly coordination systems, where owners are more likely to serve social as well as economic interests, firms are likely to be motivated to

address the needs of a broader group of stakeholders (Aguilera et al., 2007). Perhaps even more important, in these systems, firms are less likely to be penalized by financiers and owners if interests beyond shareholders are addressed. Taken together, there are good reasons to believe that coordination in corporate governance plays a major role in shaping CSP at the national-level.

## CHAPTER 7. IMPLICATIONS FOR FUTURE RESEARCH

### 7.1. Explaining Variation *within* LMEs and CMEs

Although coordination in corporate governance was associated with CSP *processes* and *outcomes*, coordination in labour relations was not found to be associated with social *processes* and *outcomes*. This is surprising because coordination in labour relations suggests strong employee representation in the workplace, which has been argued to lead to stronger firm performance on social dimensions (Campbell, 2007). A possible reason why no relationship was found between coordination in labour relations and firm performance on social dimensions stems from a shortcoming of the varieties of capitalism approach itself. Many scholars have criticized the VoC framework for providing too simplistic of a distinction between LMEs and CMEs without paying adequate attention to the variation that occurs *within* LMEs and CMEs (Gospel & Pendleton, 2003). This criticism is perhaps most evident in comparisons between the United States and the United Kingdom (see Aguilera et al., 2006; Brammer & Pavelin, 2005; Wood & Godard, 1999). While both of these countries are categorized as LMEs in the VoC literature, they have important differences in terms of their histories, state paradigms, institutional development, and business systems. This has led to very different actions on the part of firms in these countries even though they can both be classified as LMEs (see Table #4). For example, although both countries have relatively weak coordination in labour relations, the manner in which firms interact with unions and employees is quite different. For example, the US has historically had a largely adversarial relationship with unions (see Thelen, 2004). This has not been the case in the UK, where unions and employee interests have tended to be largely accepted by management (Thelen, 2004). Thus, although formal arrangements in labour relations is

similar between the two countries, the *informal* manner in which firms and labour interacts is considerable different. This along with other factors (see Thelen, 2004) might help to explain why the two countries differ on social dimensions of CSP.

The two countries also differ with regards to corporate governance. Although, both countries have relatively weak coordination in corporate governance and are financed by a widely dispersed stock market, the makeup of investors – specifically institutional investors – is quite different between the two countries (Aguilera et al., 2006; Gospel & Pendleton, 2003). The majority of institutional investors in the US are mutual funds and investment banks. These investors rely on quarterly payout obligations (Aguilera et al., 2006). In the UK, the majority of institutional investments are from pension funds and insurance companies, which have a more long-term payout obligation than mutual funds and investment banks (Aguilera et al., 2006). These differences among institutional investor composition influences the time horizon adopted by firms. In the UK, as Aguilera et al. (2006) argue, investors “might more readily adopt a long-term perspective on the risks and opportunities presented by portfolio companies; that is, they might act as patient capital” (2006: 150). This allows firms to pursue social and environmental objectives that are long-term in nature (Aguilera et al., 2006). In the US, the payout obligations for mutual funds and investment companies make firms less able to deviate from short-term economic objectives. This likely makes it more difficult for firms to pursue social and environmental objectives if they are long-term in nature. As Johnson and Greening (1999), put it “to be responsive (to institutional investors pursuing short-term gains), the top management of firms does not manage for the long-term or adequately respond to diverse stakeholders such as communities, employees, the environment, and women and minorities” (1999: 566). Thus,

although both countries display similar levels in coordination in corporate governance, there are still considerable differences in corporate governance and financing between the two countries that may explain why they perform quite differently on social and environmental dimensions.

The above seeks to demonstrate that although the VoC approach is useful for studying how institutions influence the actions of firms at the national-level, it does not adequately address variation within LMEs or CMEs. Future research in the area would benefit from moving beyond the VoC framework and instead examine how unique histories shape the formal informal rules and norms in different countries. Several frameworks for this kind of analysis have been offered in the comparative political economy and industrial relations literatures (see Godard, 2008; Thelen, 1999; Whitley, 1999).

## **7.2. CSP Processes and Outcomes**

A major component of this study was the separate measurement of CSP *processes* and *outcomes*. Given the influence of Wood's (1991) CSP framework in the literature, it is surprising that few studies have separately measured CSP *processes* from *outcomes* (see Wood, 2010). Instead of separating CSP *processes* from *outcomes*, studies have tended to measure either *processes* (e.g. Gjølborg, 2009; Waddock & Graves, 2006) or *outcomes* (e.g. Maloni & Brown, 2006). As I have argued in this paper, CSP *processes* and *outcomes* are different categories and need to be treated as such. Although different, there are reasons to believe that CSP *processes* and *outcomes* are positively associated with each other (Wood, 1991). At a minimum, the presence of social and environmental *processes* within a firm provides a means to formally address these issues in the day to day decisions of the firm as well as at the broader strategic level (Wood, 1991). As Wood (2010) puts it, "the processes by which these (social and

environmental) *outcomes* are produced, monitored, evaluated, compensated and rectified (or not) are defined by the *processes* of corporate social responsiveness” (2010: 50).

This is not to say that CSP *processes* and *outcomes* are always related. As Weaver et al. (1999) demonstrate in their study of corporate ethics policies, it is possible for firms to adopt ethics policies without formally integrating these policies into daily operations. In these cases, the adoption of *processes* is not likely to be associated with *outcomes*. Also, as mentioned earlier, some firms may ‘greenwash’ by adopting certain *processes* (e.g. environmental management system) to avoid public scrutiny or gain a competitive advantage without necessarily following through on these initiatives (Laufer, 2003). In cases of greenwashing, it is also unlikely that the presence of CSP *processes* will be positively associated with *outcomes*. Even though cases of greenwashing exist (see Bansal & Clelland, 2004), in general we can predict that firms that have adopted social and environmental *processes* will also perform well on social and environmental *outcomes*.

To stimulate future research in this area, I tested the relationship between social and environmental *processes* and *outcomes*. The results of this analysis are presented in Appendix C. As the regression indicates, social *processes* did produce a small positive association with social *outcomes* ( $\beta = .04$ ), which was significant at  $p < .001$ . This effect size remained significant with all control variables and independent variables included in the regression (see Model 4). However, no association was found between environmental *processes* and *outcomes* ( $\beta = .01$ ). To determine whether market economy (LME or CME) influenced the relationship between *processes* and *outcomes* I created an interaction term between market economy and social and environmental *processes* and regressed it on social and environmental *outcomes*. The results

indicated that the relationship between social and environmental *processes* and *outcomes* differed between LMEs and CMEs. For example, in LMEs the presence of social *processes* was found to be positively associated with social *outcomes* ( $\beta = .04$ ) and was significant at  $p < .001$ . In CMEs, there was no significant relationship found between social *processes* and *outcomes* ( $\beta = -.02$ ). In contrast, the relationship between environmental *processes* and *outcomes* produced opposite results. For example, in LMEs there was a weak negative association found between environmental *processes* and *outcomes* ( $\beta = -.03$ ) and CMEs have a positive association between *processes* and *outcomes* ( $\beta = .04$ ) which was significant at  $p < .05$ . Thus, the relationship between *processes* and *outcomes* differed by the dimension being measured (social or environmental) and by the market economy firms were embedded within (CME or LME).

Why did these differences occur? For social dimensions, *processes* were positively associated with *outcomes* in LMEs, but not CMEs. This finding is consistent with studies that argue that social *outcomes* are embedded in the institutional environment of CMEs; hence, firms in these countries need not adopt explicit CSP *processes* to address these issues (see Cuesta Gonzalez & Valor Martinez, 2004). Moreover, it follows that firms in LMEs – with less embedding of social issues in the broader institutional environment – are more likely to achieve stronger CSP *outcomes* if *processes* are adopted to address these issues (Matten & Moon, 2008).

However, the relationship between environmental *processes* and *outcomes* showed the opposite effect. That is, the presence of environmental *processes* in firms was positively associated with environmental *outcomes* only in CMEs. In LMEs, as firms adopted more environmental *processes*, their performance on environmental *outcomes decreased*. This finding highlights the importance of separately measuring social and environmental dimensions of CSP.

It appears that the adoption of environmental *processes* works to improve environmental *outcomes* for firms in CMEs. Perhaps in CMEs, environmental objectives are not as embedded in the broader institutional environment as social objectives are; hence firms in CMEs are more likely to have a stronger performance on environmental *outcomes* if they adopt specific *processes* to address these issues. Surprisingly, for firms in LMEs, the presence of environmental *processes* was negatively associated with environmental *outcomes*. While this result may initially seem counterintuitive, there are a few reasons why this might be occurring in LMEs. First, firms with a low performance on environmental *outcomes* may be operating in industries that are known to produce a large number of negative externalities (e.g. mining). In these industries firms are likely to be under pressure from external parties to address environmental issues (cf. Hoffman, 1999). However, firms in LMEs may face considerable constraints in addressing these issues if doing so requires deviations from short-term profitability (Aguilera, et al., 2007). Thus, while firms in LMEs may adopt environmental *processes* to respond to external pressures, the adoption of environmental *processes* may not be positively associated with environmental *outcomes* due to the weak institutional support that environmental performance receives in LMEs. This is not meant to infer that these firms are engaging in greenwashing—although this is a possibility (see Laufer, 2003). Rather, firms in LMEs face constraints (e.g. from financiers and competitors) that makes substantial investment in environmental performance difficult when it deviates from short-term economic objectives. Hence, regardless of their motivations, it may be difficult for firms in these market economies to integrate environmental *processes* into everyday operations in such a way that it positively influences environmental *outcomes* (Weaver et al., 1999).

These findings have a number of implications for future research. First, the results demonstrate the importance of separating both the dimensions of CSP being measured (social and environmental) as well as the categories being measured (*processes* and *outcomes*). Future research in the area might further examine these relationships to gain a better understanding of how and why they occur. Second, these findings demonstrate that the market economy a firm is embedded within might influence how CSP *processes* relate to *outcomes* within the firm. The interplay between the adoption of CSP *processes* and the *outcomes* of firm actions is likely to be influenced by the institutional setting and the dimension of CSP.

## CHAPTER 8. LIMITATIONS AND FUTURE RESEARCH

There are several limitations with this study. In this section, I discuss some of the most pressing issues and offer suggestions for future research.

### 8.1. Data Set and Measurement

The problems with obtaining valid and reliable measurements of corporate social performance have been widely discussed in the literature (Carroll, 2000; Rowley & Berman, 2000; Wood, 2010). While the CSID offers several advantages over other measures of CSP such as self-report measures or company reports in terms of reducing possible biases, the database is not without its shortcomings. First, it is difficult to ascertain exactly how the scores are being generated. The CSID database appears to rely on publically-available data. Hence, they may not have the necessary access to the company to get reliable measures of CSP. Second and more importantly, the cross-sectional nature of the data does not allow us to study how the relationship between CSP *processes* and *outcomes* changes and develops over time in different market economies. Because of this, these results should be interpreted with caution since it is possible that the relationship between *processes* and *outcomes* needs to be observed over time since CSP *processes* are not likely to have a result on *outcomes* immediately. In actuality, the positive *outcomes* brought on by the adoption of *processes* may not be observable for many years following their adoption. Because of this, future research would benefit from examining the relationship between CSP processes and outcomes in a comparative context *over time*.

### 8.2. Other Institutional and Structural Drivers of CSP

The comparative macro approach adopted in this study required making several concessions. First, to prevent the analysis from getting overly complex, it was necessary to

selectively pick and choose the independent variables of interest for the study. I chose to focus on key variables from the VoC framework. However, there are other important variables associated with the VoC framework including national education and training systems, government regulations, and social policy (Hall & Soskice, 2001). Moreover, there are several other national-level variables not included in the VoC framework which also may shed light on the national-drivers of CSP including state paradigms (Godard, 2008), constitutive laws and rules (Edelman & Suchman, 1997), and historical conditions (Thelen, 1999). These variables likely add more to the story on the national drivers of CSP. I leave it to future research to include a broader set of institutional variables to examine cross-national variation in CSP.

Second, I chose to focus on national-level variables associated with CSP. By doing this I have excluded important meso and micro structural variables which may influence CSP such as industry (Bansal and Roth, 2000), public visibility (Greening & Gray, 1994), and firm size (Johnson & Greening, 1999). Future research would perhaps benefit from marrying national-level variables with meso-level variables to see how institutions at the national-level interact with industry-level variables to produce unique CSP *processes* and *outcomes* between and within institutional environments.

## CHAPTER 9. CONCLUSION

In this study, I have sought to empirically demonstrate how institutions at the national-level relate to the CSP of firms operating in different countries. The results support the notion that CSP does vary cross-nationally, and that national differences in key areas such as corporate governance appear to influence both the *processes* firms adopt to address social and environmental issues, and the *outcomes* of firms actions on social and environmental dimensions. Furthermore, the broader institutional environment (and market economy) a firm is embedded within may influence the relationship between CSP *processes* and *outcomes*. For scholars interested in pursuing research on the drivers of CSP, understanding the structural and institutional factors appears to be a necessary consideration.

The results of this study demonstrated that the institutional structures of CMEs tend to produce a higher CSP than the institutional structures of LMEs. From a public policy perspective, these results appear to support the argument that to improve CSP in LMEs it would be useful to insert the institutional structures of CMEs into LMEs. However, arguments like this should be made with extreme caution. Institutions are supported by historical norms and traditions which make them quite resistant to change (Thelen, 1999). Because of this, it is likely that inserting the institutions of CMEs into countries characterized by the structure of LMEs and vice versa would be extremely difficult, if not impossible. For example, as Fiss and Zajac (2004) demonstrate, the introduction of a shareholder value approach in Germany was met with considerable resistance due to the strong embeddedness of the traditional stakeholder model in Germany. Hence, institutions that do not ‘fit’ with historical norms and traditions are not likely to be sustainable in the long-term. Rather, institutional evolution is ongoing process than tends

to unfold in countries on a particular trajectory that is shaped by historical factors (Thelen, 1999). Similarly, changes to the underlying institutions that drive CSP in different countries is likely to be an ongoing and continuous process.

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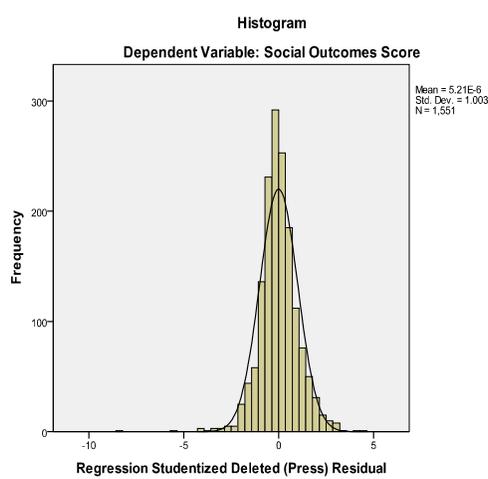
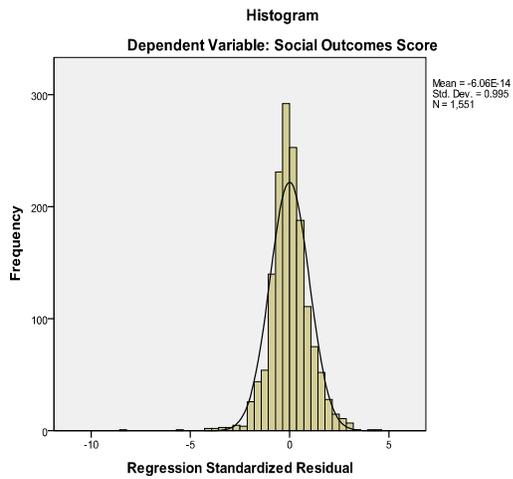
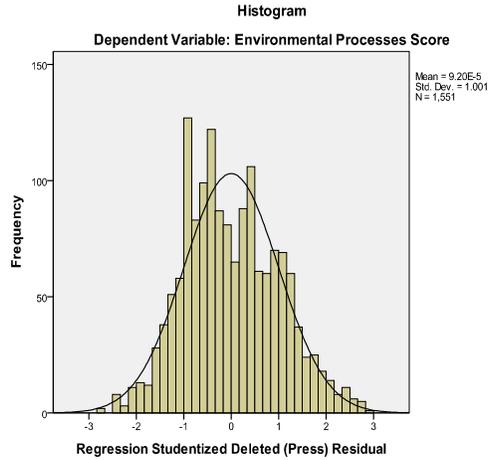
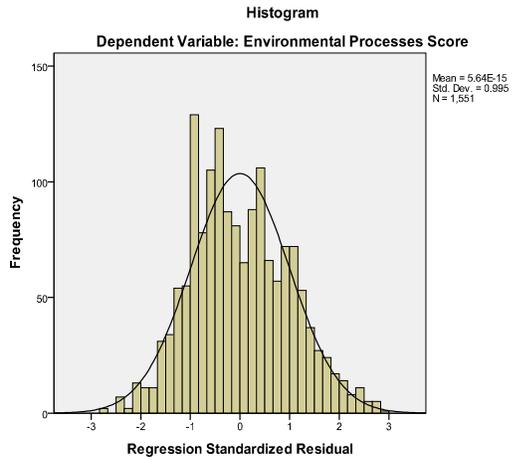
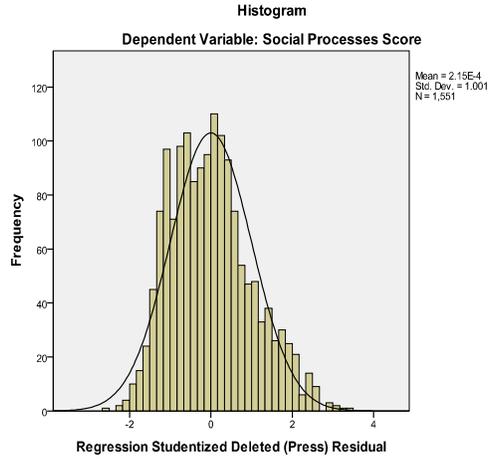
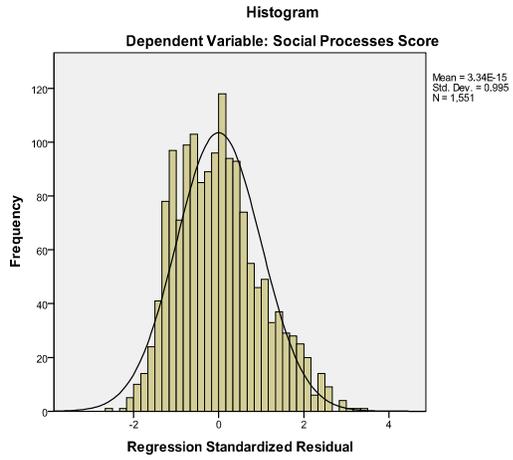
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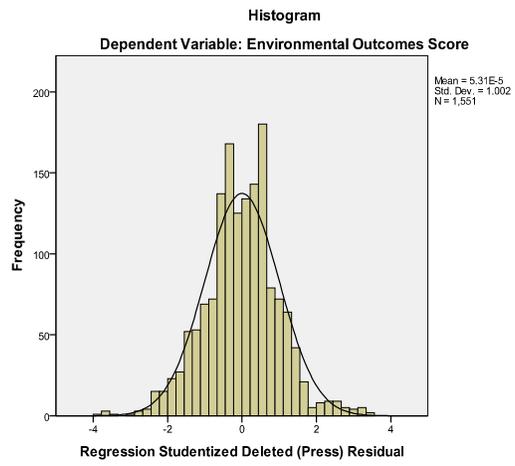
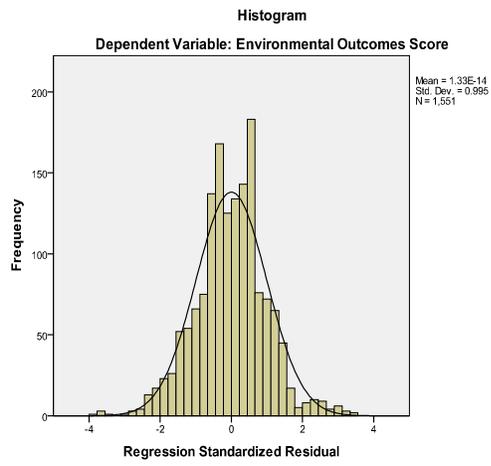
## Appendix A – CSID Social and Environmental Processes and Outcomes

<b>Dimension</b>	<b><u>Social Processes</u></b>
Employees	Policy on Freedom of Association
Employees	Formal Policy on the Elimination of Discrimination
Employees	Programmes to Increase Workforce Diversity
Supply Chain	Scope of Supply Chain Standards
Supply Chain	Supply Chain Monitoring System
Philanthropy	Guidelines for Philanthropic Activities and Primary Areas of Support
Philanthropy	Corporate Foundation
	<b><u>Environmental Processes</u></b>
Operations	Formal Environmental Policy
Operations	Environmental Management System
Operations	External Certification of EMS
Operations	Participation in the Carbon Disclosure Project (CDP)
Operations	Scope of Corporate Reporting on GHG Emissions
Operations	Programmes to Reduce GHG Emissions
Supply Chain	Programmes to Increase Renewable Energy Use
Supply Chain	Formal Policy on Green Procurement

<b>Dimension</b>	<b><u>Social Outcomes</u></b>
Employees	Percentage of Employees Covered by Collective Bargaining Agreement
Employees	Employee Turnover Rate
Employees	Employee Related Controversies or Incidents
Supply Chain	Supply Chain Related Controversies or Incidents
Customers	Customer Related Controversies or Incidents
Society & Community	Activities in Sensitive Countries
Society & Community	Society & Community Related Controversies or Incidents
Philanthropy	Percent Cash Donations of NEBT
	<b><u>Environmental Outcomes</u></b>
Operations	Environmental Fines and Non-Monetary Sanctions
Operations	Carbon Intensity
Operations	Carbon Intensity Trend
Operations	% Primary Energy Use from Renewables
Operations	Operations Related Controversies or Incidents
Supply Chain	Supply Chain Related Controversies or Incidents
Products & Services	Products & Services Related Controversies or Incidents

## Appendix B – Distribution of the Data





## Appendix C – Supplemental Analysis

### i. CSP Processes Regressed on Outcomes

Variables	<b>Social</b>				<b>Environmental</b>			
	<b>Model 1</b>		<b>Model 2</b>		<b>Model 1</b>		<b>Model 2</b>	
	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>
Constant	25.99	1.08	25.68	1.07	26.74	1.25	26.63	1.28
<i>Cultural Controls</i>								
Individualism	-.06**	.01	-.06**	.01	-.02	.01	-.02	.01
Power Distance	.03*	.02	.03	.02	-.01	.02	-.01	.02
Masculinity	.01	.01	.01	.01	.01	.01	.01	.01
Uncertainty Avoidance	-.03*	.01	-.03	.01	-.02	.02	-.02	.02
<i>Industry Controls</i>								
Conglomerates	.10	.26	.13	.26	.47	.30	.48	.30
Consumer Goods	.58*	.21	.46*	.21	.54*	.25	.55*	.25
Financial	-.67*	.25	-.68*	.24	.55	.28	.57*	.29
Health Care	1.32**	.27	1.25**	.27	.42	.31	.43	.31
Industrial Goods	.53*	.23	.50*	.23	.40	.27	.39	.27
Services	1.14**	.23	1.09**	.23	.24	.27	.25	.27
Technology	.94**	.26	.85*	.26	.41	.30	.41	.30
Utilities	2.90**	.30	2.74**	.30	.18	.34	.16	.35
<i>Hypothesized Variables</i>								
Coordination in Corporate Governance	5.51**	.93	5.13**	.93	-1.55	1.08	-1.55	1.08
Coordination in Labour Relations	-5.46**	.82	-5.42**	.82	2.71*	.95	2.67*	.96
<b>Processes (Soc &amp; Env)</b>	-	-	<b>.041**</b>	<b>.01</b>	-	-	<b>.01</b>	<b>.01</b>
R <sup>2</sup>	.17		.19		.02		.02	
F	22.85		23.26		3.12		2.93	
Δ R <sup>2</sup>	NA		.01		NA		.00	
F for Δ R <sup>2</sup>	NA		24.17**		NA		.21	

\* p<. 05

\*\* p< .001

**ii. Interaction of Processes and Market Economy  
Regressed on Outcomes**

Variables	<u>Social Outcomes</u>		<u>Environmental Outcomes</u>	
	<i>b</i>	s.e.	<i>b</i>	s.e.
Constant	25.28	1.01	26.29	1.18
<i>Cultural Controls</i>				
Individualism	-.04**	.01	-.01	.01
Power Distance	.01	.02	-.02	.02
Masculinity	-.03**	.00	-.01	.00
Uncertainty Avoidance	.01	.01	.00	.01
<i>Industry Controls</i>				
Conglomerates	.03	.26	.44	.30
Consumer Goods	.46*	.21	.46	.25
Financial	-.69*	.25	.58*	.29
Health Care	1.18**	.27	.26	.31
Industrial Goods	.36	.23	.21	.27
Services	1.11**	.23	.20	.27
Technology	.72*	.26	.26	.30
Utilities	2.8**	.30	.17	.35
<i>Interaction Term</i>				
LME*Processes	.04**	.01	-.03	.02
CME*Processes	-.02	.01	.04*	.02
R <sup>2</sup>		.16		.03
F		20.64		3.01

\* p<. 05

\*\* p< .001

**iii – Demonstration of Interactions**

<u>Social Processes</u>			
<b>Market Economy</b>	Low	Medium	High
LME	21.22	21.72	21.79
CME	21.98	22.07	22.06
<u>Environmental Processes</u>			
<b>Market Economy</b>	Low	Medium	High
LME	24.86	24.66	24.41
CME	25.14	25.34	25.47

