Strategic Management and the Role of Business Strategy in Responsible Purchasing and Supply

Hoejmose, Stefan

Award date:
2010

Awarding institution:
University of Bath

Link to publication
STRATEGIC MANAGEMENT AND THE
ROLE OF BUSINESS STRATEGY IN
RESPONSIBLE PURCHASING AND SUPPLY

Submitted by
Stefan Ulstrup Hoejmose
A thesis submitted for the degree of Doctor of Philosophy
University of Bath
School of Management
September 2010

COPYRIGHT
Attention is drawn to the fact that copyright of this thesis rests with its author. A copy of this thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and they must not copy it or use material from it except as permitted by law or with the consent of the author.

This thesis may be made available for consultation within the University Library and may be photocopied or lent to other libraries for the purposes of consultation.
Summary

Corporate social responsibility in global supply chains has become an increasingly salient issue for many organisations. In a response to this, the aim of this research is to consider the influence of strategic management, and in particular the role of business strategy, in shaping socially and environmentally responsible purchasing and supply management activities. In examining this theme, this research draws heavily upon recent conceptualisations of the relationship between strategic management and corporate social responsibility, and empirically assesses this relationship with a focus on such practices within the supply chain.

Using a novel data collection approach to capture firms’ actual social and environmental supply management activities, these data draw on interviews with 178 UK-based firms and observations of 340 separate buyer-supplier relationships. Primary data were supplemented with secondary data to capture both industry and firm characteristics. This methodology minimises social desirability bias and common source bias.

The findings suggest that responsible purchasing and supply management is strongly driven by business strategy in the business to consumer market. In contrast, in the business to business market such initiatives are largely influenced by firms’ financial resources and economic obligations. In both the business to consumer and business to business sector, however, business strategy and financial resources are contingent on the industry environment. Hence, the industry environment plays a significant, albeit indirect, role in shaping socially and environmentally responsible purchasing and supply management activities.

This research offers one of the first insights into how strategic management, and in particular how business strategy, influences firms’ investments in socially and environmentally responsible purchasing and supply management initiatives. Through conceptual and empirical investigations this research highlights this relationship and notes the importance of integrating business strategy with general supplier practices, with a focus on the implementation of corporate social responsibility in individual buyer-supplier relationships.
To my best friend and wife, Emma Jane Bevan, who has done more than her fair share of the household chores during the last few years. I am forever grateful for your patience and support – without it, I would never have reached the finish line.
# TABLE OF CONTENTS

1. **INTRODUCTION** ........................................................................................................ 15

   1.1. Introduction ............................................................................................................. 16
   1.2. Research objective and questions ............................................................................ 18
   1.3. Original contributions ............................................................................................. 20
   1.4. Research approach and philosophy ......................................................................... 22
   1.5. Definition and clarification of key terms .................................................................. 22
   1.6. Thesis structure ...................................................................................................... 27
   1.7. Conclusion ............................................................................................................... 28

2. **LITERATURE REVIEW AND RESEARCH AGENDA** ................. 32

   2.1. Introduction ............................................................................................................. 32
   2.2. Literature review methodology and bibliometric account ....................................... 33
   2.3. Themes of responsible purchasing and supply management .................................. 42
   2.5. Research agenda ................................................................................................... 72
   2.5. Summary and conclusion ......................................................................................... 85

3. **STRATEGIC MANAGEMENT AND BUSINESS STRATEGY** ..... 88

   3.1. Introduction ............................................................................................................. 88
   3.2. Strategy and strategic management ......................................................................... 89
   3.3. Business strategy ................................................................................................... 91
   3.4. From strategic management to business strategy .................................................. 95
   3.5. Conclusion ............................................................................................................... 105

4. **A STRATEGIC PERSPECTIVE OF THE INFLUENCES ON RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT: CONCEPTUAL FRAMEWORK AND PROPOSITION DEVELOPMENT** .................................................. 108

   4.1. Introduction ............................................................................................................. 108
   4.2. Conceptual framework .......................................................................................... 109
   4.3. Proposition development ....................................................................................... 114
   4.4. Conclusion .............................................................................................................. 129
List of figures

Figure 1 - Issues Considered in the RPSM Literature ..........................................................36
Figure 2 - Number of Publications per Year, Aggregated, Social, Environmental, and Both ..36
Figure 3 - Epistemological Orientation .............................................................................39
Figure 4 - Methodology .....................................................................................................40
Figure 5 - Methodology and Epistemological Orientation, Aggregate, Quantitative and Qualitative.............................................................................................................40
Figure 6 - Main Themes in the Responsible Purchasing and Supply Chain Literature........43
Figure 7 - Number of SA8000 Certifications, 1998-2008 .................................................72
Figure 8 - The Structure-Conduct-Performance Model ......................................................97
Figure 9 - The Structure-Conduct-Performance Model, Revised .......................................98
Figure 10 - The Strategic Management Process ................................................................104
Figure 11 - Conceptual Framework, from Industry to Slack to Strategy to RPSM ...........111
Figure 12 - Distribution of the Social Score .......................................................................157
Figure 13 - Distribution of the Environmental Score ..........................................................158
Figure 14 - Industry Means ...............................................................................................161
Figure 15 - Significance of Mean Differences across Industries .........................................162
Figure 16 - Significant Differences across Firm Size ........................................................164
Figure 17 - Significant Differences across Supplier Locations ..........................................167
Figure 18 - Conceptual Model, the Relationship between ILC and RPSM .......................187
Figure 19 - The Relationship between ILC, Business Strategy, Supply Processes and RPSM ...........................................................................................................................................195
Figure 20 - Industry, Supply and RPSM Characteristics over the ILC ............................197
Figure 21 - Classification of Industry Life Cycle Stages ......................................................199
Figure 22 - Organisational Slack and RPSM .....................................................................217
Figure 23 - Conceptual Framework, Business Strategy and RPSM ................................238
Figure 24 - Conceptual Framework, Business Strategy, Supply “philosophy” and RPSM ...239
Figure 25 - From Industry to Resources to Strategy to RPSM .........................................265
Figure 26 - An Exploratory Structural Equation Model ....................................................283
Figure 27 - Strategic Management and the Role of Business Strategy in RPSM, A Final Thought and Observation .........................................................................................299
List of tables

Table 1 - Key words and search term series ................................................................. 34
Table 2 - Number of Publications per Journal ............................................................... 42
Table 3 - Drivers of Responsible Purchasing and Supply Management ......................... 53
Table 4 - Barriers to Responsible Purchasing and Supply Management ....................... 64
Table 5 - Definitions of Strategy and Strategic Management ........................................ 89
Table 6 - Elements of the Research Process .................................................................. 134
Table 7 - Correlations and Concordance Coefficients .................................................. 142
Table 8 - Correlation Matrix and Factor Analysis ......................................................... 143
Table 9 - Job Description of Participants ..................................................................... 148
Table 10 - Industry Breakdown of Sample ................................................................... 149
Table 11 - Dimensions of Social and Environmental Purchasing and Supply: Means and Std. Dev. ........................................................................................................ 159
Table 12 - Significant Differences between Dimensions .............................................. 160
Table 13 - Firm size and RPSM ..................................................................................... 163
Table 14 - Ownership Structure and RPSM ................................................................. 165
Table 15 - Supplier Location and RPSM ....................................................................... 166
Table 16 - Supplier Development, Factor Analysis ....................................................... 173
Table 17 - Product Complexity, Factor Analysis ............................................................. 176
Table 18 - Product Importance, Factor Analysis ............................................................. 176
Table 19 - Supplier Dependence, Factor Analysis .......................................................... 177
Table 20 - Buyer Dependence, Factor Analysis .............................................................. 177
Table 21 - Factor and Reliability Analysis of ILC Characteristics ................................ 198
Table 22 - Categorical Variables of ILC Stages and B2C/B2B sectors: Categorical variables of ILC stages and B2C/B2B sector ................................................................. 201
Table 23 - ILC Stages and RPSM; Cluster Analysis ....................................................... 203
Table 24 - Means, Standard Deviations and Inter-Correlations of Key Variables; Aggregated ................................................................................................................. 204
Table 25 - Regression Analysis, ILC (Growth) and RPSM, N=313 ............................ 206
Table 26 - Means, Standard Deviations and Inter-Correlations of Key Variables, Aggregated .......................................................... 224
Table 27 - Regression Analysis, Organisational Slack and RPSM, Aggregated ............. 226
Table 28 - Regression Analysis, Organisational Slack and RPSM, Business to Consumer ... 229
Table 29 - Regression Analysis, Organisational Slack and RPSM, Business to Business ..... 230
Table 30 - Supporting Evidence, Organisational Slack and RPSM ................................ 232
Table 31 - Factor Analysis, Business Strategies ................................................................. 247
Table 32 - Factor and Reliability Analysis, Business Strategies ........................................ 248
Table 33 - Means, Standard Deviations and Inter-Correlations of Key Variables, Aggregated ........................................................................ 251
Table 34 - Regression Analysis, Business Strategy and RPSM, Aggregated, N=340 .......... 252
Table 35 - Regression Analysis, Business Strategy and RPSM, Business to Consumer, N=177 .................................................................................. 255
Table 36 - Regression Analysis, Business Strategy and RPSM, Business to Business, N=163 ............................................................................... 257
Table 37 - Regression Analysis, Business Strategy and RPSM (Secondary Data) .......... 259
Table 38 - Industry Environment Dimensions and Measurements ................................... 275
Table 39 - Factor Analysis: Munificence, Dynamism, and Complexity ........................... 276
Table 40 - Partial Covariance Matrix for SEM ................................................................. 284
Table 41 - Path Analysis ................................................................................................. 285
Table 42 - Goodness of fit indices .................................................................................. 288
CHAPTER 1
1. INTRODUCTION

1.1. Introduction

During the last two decades, both corporate social responsibility (CSR) and purchasing and supply chain management have received considerable academic attention. Scholars, such as Bowen (1953) and Davis (1960) were among the first to consider the ethical responsibilities of business managers and their use as a strategic tool (see also Carroll, 1999). Today, CSR has moved from being predominantly a discretionary activity of large corporations, to an increasingly salient and strategic issue to most organisations (Carroll, 1999; Heslin and Ochoa, 2008). Research in the CSR field has in the last twenty years established a variety of benefits of CSR activities. Among others, researchers have found a positive relationship between CSR and firms’ financial performance (Orlitzky et al., 2003; Waddock and Graves, 1997), reputation (Brammer and Millington, 2005; Brammer and Pavelin, 2006), risk reduction (Orlitzky and Benjamin, 2001), employee attractiveness and employee commitment (Behrend et al., 2009; Collier et al., 2007), and consumer and product perception (Mohr et al., 2001; Page and Fearn, 2005; Singh et al., 2008).

Alongside the development of CSR, but independently, the purchasing and supply chain function of organisations has been acknowledged to be a real source of competitive advantage (Lambert and Cooper, 2000). Purchasing and supply chain management has evolved from being a decentralized and obscure function of the firm, to a function that has been acknowledged for its importance in improving a firm’s operational performance (Chen et al., 2004; Ellram and Carr, 1994). Strategic management of the purchasing and supply chain function has been shown to foster long-term, cooperative relationships, which in turn influence a firm’s supply chain responsiveness (Carr and Smeltzer, 1999, Chen et al., 2004). Furthermore, strategic management of the purchasing and supply chain function has been associated with improved financial performance (Carr and Pearson, 1999), and “many companies have achieved substantial cost savings” by engaging in strategic purchasing and supply chain management (Chen et al., 2004, p. 510) through the reduction of suppliers in the...
supplier base and the development of relationships with the remaining suppliers (Guimaraes et al., 2002, p. 630 in Chen et al., 2004, p. 510; see also Cousins and Spekman, 2003).

Nevertheless, only relatively recently have both CSR and supply chain management been considered in connection with one another. As the two fields have developed, so has the issue of socially and environmentally responsible processes been integrated into the purchasing and supply chain function of the firm. The topic of responsible purchasing and supply management (RPSM) has been recognised as an important issue for managers, academics and policy-makers, due to growing pressure for organisations to behave responsibly throughout the supply chain and to take responsibility for their suppliers (Roberts, 2003).

Media coverage, along with a number of high-profile companies’ irresponsible practices within their supplier relations (see Phillips and Caldwell, 2005) and the development of consumer awareness, has also shown that consumers are willing to penalise companies that do not act in a socially and environmentally responsible manner in their supply chains and their global procurement transactions (Hurst, 2006). Often, firms have responded to both institutional and stakeholder pressure by implementing RPSM practices, through codes of conduct, monitoring and third-party accreditations, such as ISO 14001, SA 8000, ETI1 (Pedersen and Andersen, 2006; Millington, 2008).

The management of RPSM is of particular relevance in today’s business world (see also Millington, 2008). Partly because of outsourcing and globalisation (Humphrey and Schmitz, 2001; Krueger, 2008), which has raised the question of the boundaries of CSR (Roberts, 2003), and which may have implications for RPSM engagement (Preuss, 2001); and partly because, as described by Millington (2008, p. 364):

“...the management of international supply networks poses particular problems since suppliers in different countries are subject to different regulatory regimes which may or may

---

1 ISO 14001, SA 8000 and ETI are respectively an environmental management system, a global social accountability standard, and an alliance of companies, NGOs and trade organisations which promotes ethical standards.
not be enforced. In these circumstances, lead companies in developed countries must seek to manage supply relationships where the legal obligation for environmental and social conduct lies with the supplier, and the supplier is subject to a different institutional, cultural and regulatory environment.”

Nevertheless, research in the field of RPSM remains scarce, in particular in terms of cross-national empirical research, and some researchers have suggested that RPSM has no future if integration between RPSM and strategy cannot be made (Bhandakar and Alverez-Rivero, 2007).

1.2. Research objective and questions

Having reviewed the literature, it became clear that very rarely is strategic management or business strategy considered in the context of RPSM. Empirical research has however consistently showed that purchasing and supply strategies need to be aligned with business strategies in order for firms to achieve competitive advantages (e.g. González-Benito, 2007), and that business strategy drives supply chain processes (Cousins, 2005). Similarly, conceptual research in the CSR field has argued that any CSR activities need to be aligned with the business strategy of the firm (McWilliams and Siegel, 2001; Porter and Kramer, 2006), and that CSR practices are influenced by the industry environment and the business strategy (Van de Ven and Jeurissen, 2005). The aim of this research is therefore to explore how aspects of strategic management, and in particular business strategy, are related to RPSM, and the overarching aim is:

*To study and to understand how strategic management, in particular business strategy, shapes corporate social responsibility practices within the context of purchasing and supply management.*

To explore this theme fully, this research will draw on a synthesis of classical strategic management theory, which will include an examination of how the antecedent of business
strategy, such as a firm’s resources and its industry environment, influences its purchasing and supply processes and ultimately its RPSM. In extension to the above research aim, this research will examine the following set of research questions, which all form a part of establishing the extent to which strategic management and business strategy influence and are related to RPSM processes:

1. **What role does the industry environment play in shaping a firm’s responsible purchasing and supply management activities?** Does industry environment directly and/or indirectly influence these practices? Under what industry circumstances are firms likely to engage in responsible purchasing and supply management?

2. **How do financial resources fit into the strategic explanation of responsible purchasing and supply management?** Do they mediate the role of business strategy? Or are they directly influencing responsible purchasing and supply management, thus indicating that such practices are discretionary?

3. **To what extent does firms’ business strategy influence responsible purchasing and supply management?** Is this a direct relationship that can be explained by motivations of differentiation and signalling? Or is it moderating the strategic development of suppliers, which subsequently influence responsible purchasing and supply management?

Finally, to integrate the above research questions and to understand fully the connection between business strategy and RPSM, this thesis considers the following question:

4. **What are the relationships between industry environments, firm-specific resources, business strategy, supply processes and RPSM practices?** Does the industry environment mutually influence financial resources and business strategy? If so, under what circumstances will industry environment influence responsible purchasing and supply management through its effect on financial resources and under what circumstances will industry environment influence responsible purchasing and supply management through business strategy?
In addition to these specific research questions, the purpose of this thesis is also to understand better the phenomenon that is RPSM, but in particular relating these practices to the above research questions, and hence the objective is:

- To provide a comprehensive and systematic review of the existing literature on responsible purchasing and supply management, and to assess gaps in the literature and future research avenues.

- To develop a conceptual framework, which is grounded in the theoretical gaps of the literature and which integrates aspects of strategic management with responsible purchasing and supply management.

- To conduct empirical research that tests the validity of the conceptual framework, using appropriate methods for data collection and analysis, and which gives a clear account of the role of industry environment, financial resources and business strategy in shaping responsible purchasing and supply management.

- To reflect on the strength of the findings and the research approach.

- To suggest avenues for future research directions.

1.3. *Original contributions*

Recently, a number of authors have stressed the importance of incorporating strategy with CSR efforts (e.g. Burke and Logsdon, 1996; Dentchev, 2004; McWilliams and Siegel, 2001; Porter and Kramer, 2006). Nonetheless, little is known about the empirical relationship between aspects of strategic management, including business strategy, and a firm’s CSR effort. This thesis seeks to fill this void, and will explore the theoretical and empirical relations between business strategy and CSR, placing this discussion in the context of a firm’s purchasing and supply chain activities. This research therefore fills not only a gap in the
existing literature, but also further the RPSM agenda by bringing together multiple perspectives of strategic management and assessing their influence on such practices. In so doing, this thesis introduces a new framework to understand firms’ engagement with RPSM.

From a practitioner’s perspective, this research offers an insight into the relationship between business strategy and the factors that guide it, such as the industry environment and firm-specific resources, and RPSM. Conceptually this research may therefore offer opportunities to integrate business strategy and RPSM and to take full advantage of such practices. Empirically, this research will allow firms to understand how they are integrating their business strategy with RPSM, and also shed some light on how competitors are likely to approach their RPSM practices.

This research will also examine the type of markets and firms that are likely to engage in RPSM. By identification of markets and firms that are likely to be either reactive or proactive in the RPSM field, policy-makers and NGOs would be able to target their efforts more effectively.

Finally, this research seeks to explore a firm’s actual RPSM practices, rather than polices or desired levels of engagement. This approach has been taken in order to understand fully the RPSM activities of firms, and to avoid both social desirability and common source bias. A novel data collection approach has therefore been used for the purpose of this research. Assessing how strategic management and business strategy influence a firm’s actual practices offers a more rigorous assessment of the relationship between strategy and RPSM, as it avoids the issue of window-dressing and hence captures real efforts in terms of improving social and environmental performance of purchasing and supply transactions.
1.4.  **Research approach and philosophy**

As mentioned, one of the key aspects of this research is that it makes use of a novel data collection approach\(^2\), which was adapted from Bloom and Van Reenen (2007). Often researchers face major obstacles in finding appropriate measurements for CSR performance. Frequently CSR measurements are established through self-reporting questionnaires, and this is also true for researchers that seek to measure RPSM practices. However, this is likely to create severe problems of social desirability bias (Crane, 1999). This research attempts to overcome this problem by using a semi-structured questionnaire to capture firms' *actual*\(^3\) RPSM performance. Based on the answers to these questions, firms were then scored on a scale from 1-5, respectively indicating poor and good RPSM performance.

This research is quantitative in nature. It uses statistics and regressions in its approach to examine the above research questions and the role of business strategy in RPSM. The survey that was used was designed with this in mind. Therefore the epistemology that directs this research is objective and positivist in its form.

1.5.  **Definition and clarification of key terms**

The fields of CSR and purchasing/supply management, and indeed RPSM, are all subject to a number of different definitions, and their meanings are somewhat ambiguous. For that reason, before discussing existing research, it is worth clarifying some of the words and concepts that will be used throughout this thesis.

---

\(^2\) The data for this research were collected as part of an international collaborative research project which sought to examine socially and environmentally responsible procurement practices in the United Kingdom, Italy, China and India.

\(^3\) Researchers that seek to establish an RPSM measurement through a self-reporting questionnaire are likely to face problems of social desirability bias. As such, research may not capture *actual* RPSM behaviour, but rather a firm's *desired* RPSM behaviour.
1.5.1. **Corporate social responsibility**

As RPSM is an integrated part of CSR, it is worth considering the elements of CSR and its meaning. The concept of CSR has been subject to numerous definitions (Dahlsrud, 2008) and many scholars have argued that it is an ambiguous concept, which lacks both meaning and definition (Clarkson, 1995; Carroll, 1999; Frankental, 2001; Garriga and Melé, 2004; Henderson, 2001; Kitchin, 2003; McWilliams and Siegel, 2001). However, some scholars have argued that CSR does not need a clear definition, as it is a dynamic concept, which interpretation depends on the context in which it is being considered (see Carroll, 1999; Cramer et al., 2006). Therefore, its meaning may vary and in some instances may refer to ethical and responsible behaviour, while in other instances CSR may simply be associated with philanthropy (Votaw, 1972, 1973). In general though, CSR is the idea of organisations “having obligations to society” (Dubrin, 2007, p. 183), and firms should pursue those actions that are desirable to society (Bowen, 1953; Carroll, 1999). The concept of CSR suggests that firms engage in activities that “further some social good”, which extends beyond the immediate interest of the firm and its legal obligations (McWilliams and Siegel, 2001, p. 117). CSR is therefore concerned with meeting and fulfilling “expectations and moral claims of an organisation’s stakeholders” (Maclagan, 1999, p. 43). Although CSR is about meeting its social obligations to society, Carroll (1979) notes that firms should, in order to succeed, first meet their economic responsibilities to shareholders, then their legal responsibilities, followed by their ethical and discretionary responsibilities.

For the purpose of this research, CSR is defined as a firm’s attempt to improve both its social and environmental performance, be this through community involvement, philanthropy, human rights, diversity, corporate governance, employee relations or initiatives to improve environmental performance and minimise environmental impact.
1.5.2. Purchasing, sourcing, supply and supply chain management

The existing literature often uses the terms purchasing, buying, procurement, supply and supply chain management interchangeably (Harland et al., 2006). The broadest of these concepts is supply chain management which constitutes the management, including the coordination and integration of "... all the activities involved in delivering a product from raw materials through to the customer including sourcing raw materials and parts, manufacturing and assembling, warehouse and inventory tracking, order entry and order management, distribution across all channels, delivery to the customer, and the information system necessary to monitor all of these activities" (Lummus and Vokurka 1999, p.11).

Purchasing, procurement, sourcing and supply management are all sub-categories of supply chain management. It has been suggested that these functions are concerned with "...buying the material of the right quality, in the right quantity, from the right source, delivery to the right place at the right time and at the right price" (Lysons and Farrington, 2006, p. 6).

Although there is extensive confusion regarding the distinction between procurement, outsourcing, and supply chain management (e.g. Gilley and Rasheed, 2000; Trent and Monczka, 2002), for the purpose of this study these activities are considered to involve an external vendor, and the focus is therefore on the transaction and interaction between the buying firm and its external supplier(s). Moreover, the correct terminology arguably depends on the importance of the good/service in question and the complexity of managing the supply for the good/service (Kraljic, 1983). In this thesis, the terms of purchasing, sourcing, supply and supply chain management4 may be used interchangeably, but what the reader should note is that these are all referring to the first-tier supply chain level, and as such focus on the buyer-supplier relationship. However, for the majority of this text the concept of purchasing and supply management will be used, similar to those expressed by Ellram et al. (2002) and Zsidisin et al. (2007).

---

4 The literature often uses the term supply chain management, although it in reality signifies the purchasing function and the first-tier supplier level (e.g. Bowen et al., 2001; Krueger, 2008; Min and Galle, 1997).
1.5.3. **Socially and environmentally responsible purchasing and supply management**

The abbreviation that will be used for this concept henceforth is RPSM, i.e. responsible purchasing and supply management. Combining the two definitions of CSR and purchasing/supply management, RPSM is defined as the inclusion and implementation of any activities between buyer and supplier which seek to further some social good. As a concept in this thesis, RPSM will focus predominantly on the activities that the focal (buyer) firm undertakes. Therefore, this research considers the integration of community involvement, philanthropy, human rights, diversity, corporate governance, employee relations, and initiatives to improve environmental performance and minimise environmental impact in the supply chain through the dealing of individual purchasing and supply chain transactions. This definition is similar to Carter and Jennings (2002), who argued that RPSM is the inclusion of issues surrounding the environment, ethics, diversity, human rights, safety and philanthropy/community, into the buyer-supplier relationship. A further discussion of the main facets of RPSM will be discussed in chapter 2.

1.5.4. **Strategic management and business strategy**

Strategic management is a broad concept, but for the purpose of this thesis, the interest lies in the “classical” view of strategy and strategic management. In line with the strategy literature that has influenced strategic corporate social responsibility writing (e.g. Campbell, 2007; Seifert et al., 2004; Van de Ven and Jeurissen, 2005), this research draws in particular on the industrial economics view to explain firms’ responsible conduct in their purchasing and supply management activities.

In this thesis, business strategy is concerned with the way in which firms position themselves and how they exploit market opportunities and gain competitive advantages (Grant, 2004). As such, business strategy differs from corporate strategy, as it is not concerned with the overall scope and direction of the organisation, but rather the positioning of the firm in the market place (Dess et al., 1995). Furthermore, business strategy is perceived as a continuous process,
which is heavily, if not exclusively, influenced by a firm’s resources and its industry environment (e.g. Grant, 2004; Håkansson and Snehota, 2006). Nonetheless, business strategy is a concept that is often used interchangeably with corporate strategy in the literature. For example, Zahra and Covin (1993, p. 452) define business strategy as “…the long-term plan of action a company may pursue to achieve its goals”. However, in line with a number of other scholars, the author perceives this as being corporate strategy (e.g. Chandler, 1973; Quinn, 1980). Both corporate and business strategy have however in common that they draw on a number of management fields, such as industrial economics (Porter, 1980), organisational theories (Miles and Snow, 1984; Mintzberg, 1988), and management theorists and consultants (Ansoff, 1965) (as cited by Håkansson and Snehota, 2006; p. 257). Within this text, a clear distinction needs to be made between corporate and business strategy. Most firms have both a corporate and a business strategy, and multidivisional firms have often a number of business strategies attached to different product categories and markets. Since this research is viewing CSR and RPSM partly as a differentiation strategy, business strategy is a much more applicable concept to this analysis, since it addresses how the firm positions itself among competitors. An examination of RPSM at the corporate strategy level would not, to the same extent, identify how it is used in competitive environments, but would rather describe RPSM values of the firm.

For the purpose of this thesis two definitions are worth noting. Grant (1991) defines strategy as “the match an organisation makes between its internal resources and skills, […] and the opportunities and risks created by the external environment”. Similarly, Kay (1993, p.18) defines strategy as “the match between its [the organisation’s] capabilities and its external relationships. It describes how it responds to its suppliers, its customers, its competitors, and the social and economic environment within which it operates”. These definitions unite the two theories that have dominated the literature on strategic management. These two theories are the structure-conduct-performance (SCP) and the resource-based view (RBV) and, respectively, they argue that a firm’s strategy is influenced by its external and internal environment.
1.6. **Thesis structure**

Having introduced the reader to the purpose and scope of this thesis the following chapter (chapter 2) will give an account of the existing RPSM literature. This will include a brief bibliometric analysis, which will consider the recent evolution of the field and the main methodologies and theories applied. The literature review will also provide a thematic account of existing research and will consider major and recurrent themes, including definitions and salient issues; drivers and barriers; organisational responses and implementation; and the performance implications of RPSM. Following the review of the literature, the researcher will outline a set of limitations of the existing research and propose a research agenda for future research into RPSM.

Based on the research agenda and the limitations of the extant literature, chapter 3 will give an overview of the strategic management and business strategy literature, which will subsequently lay the foundation for the development of a conceptual framework in chapter 4, which will seek to integrate industry environment, firm resources and business strategy with RPSM. Chapter 4 will also set out a number of propositions, which will be further explored and empirically tested in later chapters.

Chapter 5 outlines the methodology of data collection and philosophical approach of this research. This chapter will give an in-depth account of how the data were collected and scored, and discuss its reliability. This chapter will also consider the epistemology that has dominated the research process, along with the ethical considerations that were made in the pre- and post-data collection stage.

Before beginning the empirical and statistical analysis, chapter 6 will give an overview of the data collected as part of this research. This chapter will outline stylised facts and descriptive evidence with respect to the data collected on firms’ RPSM engagement.

Chapter 7 will give an introduction to the empirical chapters. This chapter will offer a description of the intentions of each empirical chapter alongside an account of key variables.
and control variables, which will be used in the statistical models presented in the following chapters.

In the next four chapters, i.e. chapters 8, 9, 10 and 11, a set of hypotheses will be developed about the relationship between industry environment (industry life cycle) and RPSM; firms’ resources (financial resources) and RPSM; business strategy (Porter’s generic strategies) and RPSM; and finally the integration of all these factors and their influence on both purchasing/supply processes and RPSM practices. These hypotheses will subsequently be assessed empirically through regression analysis and structural equation modelling.

Chapter 12 offers a review of the strengths, findings, implications and contributions of this thesis. This final chapter will therefore consider the limitations of this research and propose ways of further verification and assessment of the relationship between strategic management, business strategy and RPSM. In addition, this chapter will outline the major contribution and implications for practitioners, policy-makers and academics, based on both the conceptual arguments that will be made in this thesis, and the empirical findings that will be presented.

1.7. Conclusion

This chapter has outlined a number of central elements of the purpose and nature of this research. This thesis explores how strategic management, and in particular business strategy, influences socially and environmentally responsible behaviour in the purchasing and supply chain function. In so doing, it offers a new framework for describing how firms’ RPSM performance is determined. In addition, it offers valuable insight into the opportunities and common strategic behaviours of different types of firms, depending on their industry environment and business strategy. This also makes it possible for policy-makers to target firms much more effectively, by identifying the types of firms that are likely to be reactive in terms of their RPSM practices. Finally, this research offers one of the first integrations of strategy and RPSM, a field which has received substantial attention in the broader CSR areas,
and it therefore provides an important extension to the existing RPSM literature, by emphasising the need to consider such practices from a strategic perspective.
CHAPTER 2
2. LITERATURE REVIEW AND RESEARCH AGENDA

2.1. Introduction

The purpose of this literature review is to give a comprehensive insight and evaluation of the existing literature that deals with both socially and environmentally responsible initiatives in the context of firms’ purchasing and supply chain activities. The main purpose of this research is therefore twofold: first, to describe the existing literature, by exploring the evolution of, in particular, academic attention to the RPSM field and to consider how the RPSM field has been approached, both in terms of epistemology and methodology. Second, to examine some of the major issues in the RPSM literature and to present “a framework for classification and analysis” of major themes (see Croom et al., 2000, p. 68). As such, this review has two major contributions as it offers “an overview of the intellectual structure” of the RPSM field (see de Bakker et al., 2005, p. 285), and it provides a thorough account of the RPSM literature by viewing major themes and identifying major opportunities for further research (see Laplume et al., 2008). This review will differ from previous literature reviews (e.g. Seuring and Müller, 2008; Srivastava, 2007) by focusing explicitly on the responsible practices in the buyer-supplier relationship, rather than the entire supply chain and all of its production/manufacturing linkages. In addition, it will present a much stronger overview of both environmental and, in particular, social practices in this context, compared to previous reviews which have had an emphasis on environmental initiatives. Finally, this review will highlight shortcomings of the existing literature and will offer a set of opportunities for future research, through the development of a research agenda.

To review the RPSM literature fully, a review is presented of academic journal articles related to the field of RPSM using content analysis (Krippendorff, 2004; Laplume et al., 2008), and identifying key themes, trends and differences within the RPSM literature (Laplume et al., 2008). In so doing, this review makes use of both quantitative (frequency counts, trends) and qualitative (theme identification) content analysis (Laplume et al., 2008, p. 1156).
As will become clear from the bibliometric account of the literature, RPSM is very much a current issue and the topic and is still being heavily researched, both conceptually and empirically. Nevertheless, it does not appear to have become an issue for mainstream management journals. Scholars studying RPSM issues still tend to publish their articles in either “business or society” or “operational and supply chain management” related journals. Therefore, to further the RPSM field this review will take stock of the existing literature and outline opportunities for future research, which will assist the RPSM field in progressing from an ethical or supply chain issue to a strategic and managerial issue.

This review proceeds in three sections. First, the literature review methodology will be described and the evolution of the RPSM field outlined. Second, key themes of the RPSM field, including prevalent issues, drivers and barriers, implementation, outcomes and performance issues will be reviewed. Third, a set of suggestions and opportunities will be presented, which highlight areas that in particular should receive further attention from academics in the future.

2.2.   Literature review methodology and bibliometric account

2.2.1.   Literature review methodology

The methodology for this review is based upon the suggestions of Bryman and Bell (2007). Initially, books and articles on corporate social responsibility and purchasing and supply chain management were reviewed in order to get an understanding of the two major literature groups that have influenced the responsible purchasing and supply chain literature. Through this, a set of subject keywords was identified, which were then constructed into search terms, see table 1.
<table>
<thead>
<tr>
<th>Table 1 – Key words and search term series</th>
</tr>
</thead>
</table>

Supply Chain  
OR  
Supply  
OR  
Sourcing  
OR  
Outsourcing  
OR  
Purchasing  
OR  
Procurement  
OR  
Buying  
OR  
Supplier  
OR  
Distribution  
OR  
Logistic  

AND  

Corporate social responsibility OR  
Corporate responsibility OR  
Responsibility OR  
Responsible OR  
Ethics OR  
Ethical OR  
Unethical OR  
Moral OR  
Environment OR  
Sustainability OR  
Sustainable OR  
Ecology OR  
Ecological OR  
ISO 14001 OR  
“Green” OR  
Pollution OR  
Waste OR  
Recycling OR  
Reverse OR  
Closed OR  
Questionable OR  
Social OR  
Child labour OR  
Human rights OR  
Discrimination OR  
Corruption OR  
Bribery OR  
Gift giving OR  
Society OR  
ETI OR  
SA 8000 OR  
Codes of conduct OR  
Monitoring OR  
Minority supplier
The search series of table 1 were then run in the databases of Business Source Premier (EBSCO) and ISI Web of Knowledge. All types of journals, regardless of their ranking, were considered, but in line with the literature review approach of Rubio et al. (2008), brief notes, introductions, letters, editorial, professional commentaries and book reviews were not included. Variants of search terms were used. For example, searches that included both “ethics” and “ethical”, and “responsibility” and responsible” were made. In addition, books, dissertations, working-papers, government publications and unpublished research (such as articles from SSRN) which considered RPSM issues were also included. In order to manage the search results a Reference Management Database (EndNote) was created.

The searches provided over 100,000 results, so the search series were constrained to consider only academic (peer-reviewed) journals and articles which had some of the search terms in either the abstract or title. All of these articles were subsequently imported into EndNote, and duplications were deleted. Each article’s abstract was then reviewed and only articles that were relevant, i.e. had a clear emphasis on either social or environmental issues with respect to purchasing and supply chain management, were considered for this review. Key articles, i.e. articles that had been cited extensively, were also cross-referenced. In addition, the researcher regularly checked for additional articles to keep the literature updated, and new articles were also cross-referenced.

2.2.2. The evolution of the literature

A total of 304 articles were reviewed, along with four books (see Mamic, 2004; Neef, 2004; Preuss, 2005b; Rao, 2008). The diversity of issues that comes under the umbrella of RPSM was evident from a content analysis of the articles. As illustrated by figure 1, 45% (137) of the articles considered environmental purchasing and supply chain issues. 16.1% (49) considered social issues and 21.4% used a broad definition of CSR, which incorporated both social and environmental elements, in their examination of such practices within purchasing and supply chain management. Finally, 12.5% (38) considered ethical issues of corruption, bribery and deception, and 4.9% considered the ethical dimensions of diversity and minority supplier.
Figure 1 - Issues Considered in the RPSM Literature

Figure 2 - Number of Publications per Year, Aggregated, Social, Environmental, and Both

Figure 2 illustrates how the number of publications in the field of responsible purchasing and supply chain management has evolved over time. As can be observed, there has been a
significant increase in the academic interest in the field. In the last few years there has been a substantial increase in articles that separately consider social and environmental purchasing and supply chain issues, but there has also been a considerable rise in the number of articles that consider both social and environmental issues simultaneously. However, it should be noted that many of the articles that fall into the latter group, consider both issues by default as they tend to focus on the entire concept of corporate social responsibility within the supply chain. Issues of minority/diversity and general ethical behaviour of the procurement personnel have received limited attention in recent years.

Until the early 90’s there was a predominant focus on the ethical aspects of responsible purchasing and supply management, such as bribery and corruption. From 1965-1993, an average of one article was published each year considering the social and ethical dimensions of purchasing and supply chain management. In contrast, in the same period, only two articles was published which considered environmental purchasing and supply chain management. In the period of 1994-2001, an average of 3.4 articles were published each year on the subjects of social/ethical/minority/diversity, but an average of one only considered social issues in terms of working conditions, fair treatment of suppliers and similar issues. In the period of 1994-2004 more than 5 articles a year were published that considered environmental purchasing and supply chain management issues. In the same period there were also two articles that considered both social and environmental purchasing and supply chain management issues.

In more recent years, 2002-2009, the field has received considerable attention, and each year an average of 4.7 articles were published on the subject of social purchasing and supply chain management, and over 10 articles a year that considered environmental issues and nearly 7.2 articles a year that considered both social and environmental issues within the purchasing and supply chain function. In the same periods the academic attention given to more general ethical issues, including supplier diversity and minority suppliers have been fairly stagnant with an average publication per year of 2.2 articles.
2.2.3. Epistemological orientation

Based on the epistemological orientation (see de Bakker et al., 2005), articles were grouped into different categories depending on the type of research contribution they made: theoretical, prescriptive and descriptive. According to de Bakker et al. (2005, p. 294) “papers have a theoretical contribution if they enhance the systematic understanding of some phenomenon”. Prescriptive papers seek to provide “means, ideas, and recipes for action to practitioners and professionals” (p. 294). As such these papers are instrumental and normative in nature and often seek to explain the “how to do” aspects of a phenomenon. The final group is descriptive papers, which seek to report data and/or opinions. In these cases the authors may not contribute to the theoretical development of RPSM, but may still explain and clarify certain aspects of it (see de Bakker et al, 2005, p. 294).

Figure 3 shows the evolution of epistemological orientations of the existing responsible purchasing and supply chain management literature. At the aggregate level, there has been significant work to develop the theoretical field of socially and environmentally responsible purchasing and supply chain management. Much research has also been exploratory in nature and as such has sought to describe the issues related to responsible purchasing and supply chain management. Of these theoretical contributions, just over 60% of the articles have been predictive in nature, and as such been subject to the testing of hypotheses and propositions.

The analysis of the epistemological orientation and its evolution highlights how prescriptive, descriptive and theoretical contributions have all developed. In particular, it shows that there has been considerable attention paid to describing the phenomenon that is RPSM, but in more recent years greater efforts have been made to further the theoretical perspective of RPSM.
2.2.4. Methodology

Of all the articles reviewed 186 deployed some type of survey or interview as a way of forming prescriptive arguments, exploring the phenomena, or testing theory. Of these, 95 studies used quantitative techniques, 86 used qualitative techniques, and only 5 used mixed methods, as illustrated in figure 4.
Figure 4 - Methodology

![Figure 4 Diagram: Methodology Pie Chart]

Quantiative: 51%
Qualitative: 46%
Mixed methods: 3%

Figure 5 - Methodology and Epistemological Orientation, Aggregate, Quantitative and Qualitative

![Figure 5 Diagram: Methodology and Epistemological Orientation Pie Charts]

Aggregate:
- Descriptive: 44%
- Prescriptive: 6%
- Theoretical: 50%

Qualitative:
- Descriptive: 23%
- Prescriptive: 12%
- Theoretical: 65%

Quantitative:
- Descriptive: 63%
- Prescriptive: 0%
- Theoretical: 37%
Figure 5 illustrates how the use of different methodologies leads to different contributions to the RPSM literature. At the aggregate level, it can be observed that the majority of empirical research has led to descriptive contributions, followed by theoretical and prescriptive contributions. In particular, if only qualitative methods are considered, it can be seen that techniques such as case studies and focus groups tend to lead to descriptive (65%) research contributions, but also theory-building and some prescriptive guidelines. In contrast, the research that deploys quantitative techniques, contributes vastly to theory development (63%) of responsible purchasing and supply chain management. Around 37% of the researchers who use quantitative techniques also contribute to the descriptive literature. Often, such types of research seek to explore quantitatively the social and environmental purchasing and supply chain management phenomenon.

It is also worth noting that quantitative techniques are much more often used in research that considers environmental purchasing and supply chain issues. Approximately 61% of empirical research in this area used quantitative techniques and the vast majority led to theoretical contributions to literature. In contrast, in the social purchasing and supply chain management literature, researchers used qualitative techniques in the majority of cases (54%). Moreover, in this area, both qualitative and quantitative techniques sought to explore the phenomenon, and as such its major contribution was to the descriptive literature.

2.2.5. Other characteristics of the literature

Table 2 shows the number of papers in the field of responsible supply chain management that have been published in the journals that have dominated this field. *Journal of Business Ethics* has the highest number of publications in this field. However this journal tends to focus on social issues, such as codes of conduct or ethical issues of bribery. *Journal of Cleaner Production* and *Journal of Operations and Production Management* almost exclusively publish papers that are concerned with environmental purchasing and supply chain management.
Table 2 - Number of Publications per Journal

<table>
<thead>
<tr>
<th>Journal</th>
<th>Aggregated</th>
<th>Environmental</th>
<th>Social</th>
<th>Both</th>
<th>Ethics</th>
<th>Minority/Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal of Business Ethics</td>
<td>29</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Journal of Cleaner Production</td>
<td>27</td>
<td>22</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Greener Management International</td>
<td>15</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Journal of Supply Chain Management</td>
<td>15</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Supply Chain Management-an International Journal</td>
<td>15</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Journal of Production Economics</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Journal of Production Research</td>
<td>9</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Journal of Purchasing &amp; Materials Management</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Journal of Operations Management</td>
<td>7</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>International Journal of Operations &amp; Production Management</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Journal of Physical Distribution &amp; Logistics Management</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>International Journal of Purchasing &amp; Materials Management</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Business Ethics: A European Review</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Transportation Research: Part E</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

A final feature of the existing literature is that it appears to be strongly dominated by a small group of highly active researchers in the field. The top ten authors, in terms of publications, account for more than a quarter of the entire publications in this field.

2.3. *Main themes of responsible purchasing and supply management*

Having identified some broad patterns in the RPSM literature, this section will examine the main and recurrent themes that have been considered in this area of research. As mentioned, the reviewed articles were grouped into categories, depending on their main emphasis and findings of the studies. From reviewing the literature, there appear to be four main themes within the existing literature. Firstly, there is a set of papers that consider what socially and/or environmentally responsible purchasing and supply chain management is. This group explores RPSM as a phenomenon and is predominantly characterised by exploratory research. Secondly, there is a large body of literature that considers the drivers of and barriers to RPSM and which examines the factors that facilitate and hinder RPSM policies and practices. Thirdly, there is a large group of papers that consider the implementation of RPSM processes. This part of the literature is, in particular, influenced by normative contributions, and rather than assessing the actual RPSM behaviour of firms, it is often concerned with how firms “should” do RPSM, and offers recommendations for the “ideal” management of social and
environmental issues within the purchasing and supply chain function of the firm. Fourthly, part of the literature focuses on the outcomes, in terms of the benefits and the potential disadvantages of RPSM practices. Therefore a thematic framework is offered - figure 6 - in order to frame the review of the literature.

**Figure 6 - Main Themes in the Responsible Purchasing and Supply Chain Literature**

This literature review seeks to address these four themes and highlight the main emphases within these themes.

### 2.3.1. Definitions

The terminology surrounding the RPSM literature is very broad. For example, 32 of the articles reviewed used the term sustainability/sustainable in the title, and 48 articles use the term responsible/responsibility, while 82 use the term “green” in the title. Moreover, of all the articles reviewed 132 examined responsible and sustainable issues in the “supply chain”, although the vast majority only consider the first-tier supply level, and hence in reality focused on purchasing and supply management, but only 67 and 10 articles used these terms, respectively. However, as a phenomenon RPSM appears to stem more from the corporate
social responsibility literature than from the purchasing and supply chain literature. This section will review some of the definitions of RPSM and highlight their main differences.

Carter and Rogers (2008) apply the triple bottom line concept of Elkington (1997), to define sustainable purchasing and supply chain management. They acknowledge that there are three facets of responsible and sustainable supply chains, consisting of environmental and social processes and economic performance outcomes. Carter and Rogers (2008, p. 368) argue that if social and environmental supply chain practices are to become part of the mainstream, then such processes must yield superior economic performance. They therefore define sustainable supply chain management as:

“the strategic, transparent integration and achievement of an organization’s social, environmental, and economic goals, in the systemic coordination of key interorganizational business processes for improving the long-term economic performance of the individual company and its supply chains”.

In contrast, Maignan et al. (2002, p. 642) adopt a stakeholder perspective to RPSM and define it as:

“the inclusion in purchasing decisions of the social issues advocated by organisational stakeholders. In this perspective stakeholders are the agents that bring broad social demands to the attention of individual firms”.

Through 26 in-depth interviews with logistics managers, Carter and Jennings (2002) identified several categories of responsibility within the purchasing and supply chain function. The main facets of RPSM were identified as: the environment, ethics, diversity, human rights, safety and philanthropy/community. The specific environmental aspects included issues of re-use and recycling, life-cycle analysis, reducing packaging, sourcing non-hazardous alternatives, ensuring of proper labelling and documentation, and ensuring and sourcing from environmentally sound suppliers. The ethical aspects were more concerned with the buyer-supplier relationship, and included fair contracting in terms of avoidance of obscure and
misleading contracts, exaggeration, gift-giving, blaming suppliers for mistakes, and overestimating demand to gain volume discounts. Diversity was also identified as being a part of RPSM, and included “purchasing from minority/women business enterprises” (p. 153). Human rights aspects were identified as ensuring fair labour conditions and wages, and that suppliers complied with child labour laws. Safety issues of the suppliers’ manufacturing sites were also a part of responsible purchasing and supply management. Philanthropy/community aspects included assistance to local suppliers, and “auctioning or donating gifts received by the supplier” (Carter and Jennings, 2002, p. 153).

One common denominator (and one limitation) of the above definition of RPSM is that they all emphasise and define RPSM as a first-tier level of the supply chain. Often, however, the literature interprets the first-, second-, and n-order supply chain as different supply chains (Svensson, 2007).

As noted in chapter 1, for the purpose of this research, responsible purchasing and supply chain management is considered to be any activity that involves some level of corporate social responsibility initiative in the purchasing and supply chain function. This includes issues related to community involvement, corporate governance, employee relations and health and safety, environmental issues, human rights and diversity issues, which take place within the supply chain. Although the author acknowledges the criticism of Svensson (2007) this definition is similar to previous definitions, focusing on the first-tier level of the supply chain.

2.3.2. Prevalent issues

In this subsection some of the established and prevalent issues around RPSM will be considered. Neef (2004) suggests three salient issues and causes of the emergence of the RPSM concept. These three broad issues have been replicated in the following text and include globalisation, risk management and strategic concerns, which have underlined the vital role of RPSM in terms of the overall management of the purchasing and supply chain function.
Globalisation and supply chain management. A number of scholars note how the concept of corporate social responsibility has developed in recent years and how the boundaries of the firm have become “blurred” due to globalisation and long and complex supply chains (Amaeshi et al., 2008; Leigh and Waddock, 2006; Roberts, 2003). Globalisation is therefore one of the major reasons for the increased attention given to RPSM, along with the attractiveness of outsourcing activities to less developing countries, where labour is cheap and where there are weakly enforced regulatory frameworks (Preuss, 2001; Millington, 2008). This has caused firms to (out)sourse production processes abroad and to focus on their core competences (Millington, 2008). Although globalisation and outsourcing have brought a range of new opportunities for organisations, such as cost reductions and the ability to enter new markets, these activities have “come with a range of responsibilities and obligations” (Mellahi and Wood, 2003; cited in Pretious and Love, 2006, p. 894), and global sourcing processes therefore possess a set of ethical problems for firms and their purchasing and supply chain function (Pretious and Love, 2006; Wood, 1995).

Nevertheless, the existing literature predominantly focuses on how social responsibilities have become an important issue for global supply chains. In Western cultures, and in Western supply chains, social issues are concerned with bribery, corruption and general (un)ethical behaviour within the buyer-supplier relationship. For example, the work of Badenhorst (1994), Cooper et al. (2000), Handfield and Baumer (2006), Forker and Janson (1990) and Wood (1995) focuses on such issues and they base their arguments and evidence around Western, particularly American, supply chains. In contrast, social responsibility issues in the context of global supply chains tend to focus on the relationship between buyers from developed countries and suppliers from developing countries, and consider such issues as human rights, child labour, working conditions, wages and general labour conditions (e.g., Egels-Zanden, 2007; Frenkel, 2001; Lim and Phillips, 2008; Winstanley, 2002; Yu, 2008). There is thus a clear divergence of the type of responsibility that is considered when examining ethics in domestic and global supply chains (Krueger, 2008), and the chain of social responsibility thus appears to shift from addressing personal ethical behaviour, on the part of the individual.

5 First-tier supply chains
procurement professional, towards broader corporate social efforts of protecting the workforce in the manufacturing process in foreign, less developed, nations’ supply chains. This shift of responsibility, however, is not as apparent in the literature with respect to environmental purchasing and supply chain management, and the divergence of responsibility from West to East has in the literature received much greater attention from a social responsibility perspective.

Risk management. Firms may also implement RPSM in order to reduce and limit their exposure to negative media attention. One of the reasons why supply chain management has become an issue of risk management is partly due to globalisation, but also to the fragmented supply chains (Neef, 2004; Van Hoek, 2002). At an operational level, this implies that each supplier, or supply chain, is operated almost independently, and therefore the management of these processes becomes very complicated and the implementation of RPSM becomes a difficult issue to operationalise. In addition, many have viewed firms as exploiting low-cost sourcing countries by bypassing (the buyers’) domestic institutional framework (Boyd et al., 2007), and this in turn has increased consumers’ concern of how firms are operating in these countries and how they deal with suppliers from developing countries (Graafland, 2002). Nevertheless, the most revealing evidence comes from the case studies of Phillips and Caldwell (2005), who observe how consumers react towards irresponsible supply chain behaviour, and how this can have serious consequences for a firm’s reputation and financial performance.

According to Neef (2004) vertical industries are particularly exposed towards reputational risk of social and environmental supply chain practices. Within these industries, operational and manufacturing processes are relatively similar across firms, and particular industries such as light goods manufacturing (e.g. toys and house ware); textile, garment and footwear; automobile; and pulp and paper, have experienced extensive pressure for responsible supply chain behaviour (Neef, 2004). These industries have been subject to this pressure partly because consumer groups are fairly identical across them, and as such have relatively greater

---

Markets with similar products and services and similar production methods.
and collective bargaining power. Incidentally, these industries are often the ones that are subject to empirical studies in the field of RPSM, as will be revealed later\(^7\).

Strategic considerations. RPSM has increasingly been considered as a strategic issue of risk management, legitimacy and differentiation. In addition, firms are also seeing developing countries for their potential as future markets, rather than merely cheap outsourcing and cost saving opportunities (Boyd et al., 2005, p. 16). Actively promoting RPSM may also increase firms’ sales (see Lantos, 2005). Although existing evidence on the extent to which consumers are willing to purchase products with corporate social responsibility attributes is mixed, evidence has shown that such products are more likely to succeed if price and quality are similar to competitors’, and it also suggests that such practices allow firms to target an ethical consumer group (Mohr et al., 2001).

The vast majority of researchers, however, argue that the strategic consideration of RPSM is largely concerned with responding to stakeholder pressure, and seeking a “licence-to-operate” through appropriate social and environmental supply chain behaviour (Maignan et al., 2002; Neef, 2004). Nevertheless, a key contribution of this thesis will be to argue that RPSM extends beyond the legitimacy argument and that it is, and should be, something that is much more integrated with firms’ overall strategy.

Nevertheless, despite the fact that RPSM has gained considerable strategic attention in recent years (Neef, 2004), the implementation of such initiatives remains limited and is often narrowed to reactive processes, rather than proactive processes of stakeholder management, risk management, and strategic management (Min and Galle, 1997; Pedersen, 2009; Preuss, 2001), and this may be due to the complexity involved in managing RPSM issues in supply chains (Preuss, 2005a).

In summary, important issues within the context of socially and environmentally responsible purchasing and supply chain management are concerned with increasing globalisation, which

\(^7\) This feature may not be “incidental”, but rather provide an explanation for the reason that these industries have received so much attention in the literature.
has been associated with the trend of sourcing products and services from developing and low-cost countries. In turn, this has created fragmented supply chains, and increased the risk of negative media exposure and consumer pressure. Firms have also started to view RPSM as a strategic issue, and as an activity that is undertaken in order to satisfy stakeholders and to differentiate their products.

Having considered some of the important issues of RPSM, the next section turns to a discussion of the drivers of and barriers to RPSM. This is a theme, which in the existing RPSM literature, has received considerable attention.

2.3.3. Drivers and barriers

A large proportion of the literature in RPSM considers the drivers of, and barriers to responsible purchasing and supply chain management. Similarly to the papers of Cooper et al. (1997, 2000) and Walker et al. (2008), this section will review both the antecedents and drivers of RPSM, along with the barriers and challenges for its successful implementation.

This section has therefore been divided into two subsections. First, an account of the drivers of RPSM will be given; and second, an account of the barriers to RPSM.

Drivers of responsible purchasing and supply management

Introduction. The drivers of RPSM practices are broadly speaking divided into two categories: internal and external drivers (see Walker et al., 2008). The following section will first review the internal drivers, followed by a review of the external drivers of RPSM. Table 3 at the end of this section, summarises the empirical evidence on drivers of responsible purchasing and supply management.

Internal drivers. A substantial amount of the existing research views firms’ participation in responsible purchasing and supply chain management as being contingent upon the presence
of internal drivers. From the RPSM literature, it seems clear that one of the main internal drivers of RPSM is top management support and organisational values (Carter and Jennings, 2004; Drumwright, 1994; Walker et al., 2008). Carter and Jennings (2004) argue that top management is a key driver for RPSM practices because top managers are responsible for the firms’ activities and influence the culture of organisations. The empirical evidence has shown that top management support is important for both social and environmental supply chain initiatives (Carter and Jennings, 2004; Drumwright, 1994; Lee, 2008). In addition, studies into the relationship between top management support and RPSM have been considered both qualitatively (Drumwright, 1994; Walker, 2008) and quantitatively (Carter and Jennings, 2004; Lee, 2008; Park and Stoel, 2005). Many of these studies have also confirmed that organisational values influence firms’ RPSM, and some have shown that supportive internal environments, and the corporate social responsibility mission of the firm, positively influence firms’ social and environmental behaviour in the supply chain (Carter and Jennings, 2002, 2004; Zhu and Sarkis, 2006).

Beyond top management support, existing research has also identified that employees influence firms’ RPSM (Carter and Jennings, 2004; Drumwright, 1994; Park and Stoel, 2005). Drumwright (1994), through interviews, found that the key to environmentally sound supply purchasing was “policy entrepreneurs”. These were employees of the firm that were passionate about bringing environmental issues to the fore of the organisation and the supply chain, and it was due to these “policy entrepreneurs” that firms engaged in RPSM activities. One of the reasons for their importance was, as argued by Drumwright (1994), that firms rarely have a specific person who is responsible for environmental management of the procurement function. Therefore, any environmental initiatives are often voluntary and initiated by individuals, rather than by the organisation. Carter and Jennings (2002, 2004) and Park and Stoel (2005) also found that employees’ values were a key driver of RPSM practices. Carter and Jennings’ (2004) study was later replicated by Salam (2009), in the context of Thailand, who also found that top management support and organisational values were key drivers of responsible supply chain initiatives.
In addition to the value-laden factors discussed above, internal drivers of RPSM practices also include strategic factors. Conceptually, the strategic arguments for responsible purchasing and supply chain management can be grouped into four categories. Firstly, firms should engage in RPSM because stakeholders expect it, and the survival of the firm arguably depends on it (Maignan and McAlister, 2003). Secondly, firms should engage in RPSM in order to reduce the risk of negative publicity (Roberts, 2003). Thirdly, firms should engage in RPSM, particularly environmental issues, to reduce waste and ultimately reduce costs (Rao and Holt, 2005). Fourthly, firms should engage in RPSM as it will assist the firm in differentiating the product and improving market positioning strategies (Polonsky and Jevons, 2006). The empirical evidence certainly suggests that firms engage in environmental supply chain management in order to reduce costs (Carter and Dresner, 2001; Green et al., 1996; Zhu and Sarkis, 2006). There is also some evidence that shows that firms are engaging in environmental purchasing and supply chain management because it is part of their strategy, and due to a desire to improve quality (Lamming and Hampson, 1996). Welford and Frost (2006) found through interviews that social supply chain initiatives, in terms of codes of conduct, were implemented in order to reduce the risk of negative media exposure. Lee (2008) and Walker et al. (2008) also found that a desire to achieve a competitive advantage was driving RPSM.

External drivers. In extension to the role of globalisation and fragmented supply chains in driving RPSM, other external drivers are also emphasised in existing research (Min and Galle, 2001; Lamming and Hampson, 1996; Walker et al., 2008). Both conceptual and empirical research often draw on stakeholder theory when examining the external drivers of RPSM practices. Conceptually, several stakeholders and institutions have been identified as pressuring, and as driving forces of firms’ RPSM initiatives. These include customers, governments, NGOs, investors and employees (e.g. Harrison and Freeman, 1999; Pedersen and Andersen, 2006; Roberts, 2003).

Empirical evidence supports this conceptualisation of stakeholder pressure. Walker et al. (2008) found, through a qualitative study of both public and private companies, that companies experience more external than internal pressure with regards to their environmental
purchasing performance. Customer pressure has for example been shown to be an important
driver of both environmental (Green et al., 1996; Lamming and Hampson, 1996; Min and
Galle, 2001) and social supply chain issues (Carter and Jennings, 2004; Salam, 2009;
Worthington et al., 2008).

With respect to social supply chain issues, Worthington et al. (2008) compare the drivers
amongst US and UK firms, through in-depth interviews with three major US firms and six
major UK firms. Their findings suggest that government legislation and consumer pressure
were some of the main stakeholder pressures for engaging in ethical purchasing activities, in
terms of fair treatment of suppliers. Similar studies have also confirmed that government
pressure is a major driver of more general RPSM practices (Carter and Jennings, 2004; Hall,
consumer manufacturing industries, and survey 437 companies in the US. Their findings show
that the driving force of environmental purchasing practices comes mainly from customers and
the vertical coordination between suppliers and buyers, which in turn depend on the level of
uncertainty and resource-dependency of the supplier. Similarly, Zhu and Sarkis (2006) found
that it is the characteristics of the buyer-supplier relationship, such as the suppliers’ abilities,
that influence firms’ environmental initiatives.

Summary. From the literature review, it is clear that there are a number of internal and external
factors that drive firms’ RPSM practices. In particular, organisational culture, in terms of top
management support, organisational values and employee motivation, facilitates responsible
purchasing and supply chain management. In addition, consumer and government pressures
have consistently been shown to drive firms’ RPSM behaviour.

On a critical note, it is worth noting a few methodological issues with the existing literature.
For example, many studies are biased towards companies that are already perceived as
proactive in their RPSM practices (e.g. Carter and Jennings, 2002, 2004; Lamming and
Hampson, 1996; Worthington et al., 2008). Although this may provide more interesting
results, it does not give a true picture of the typical firm’s RPSM activities. In addition,
eexisting research, including the work of Carter and Dresner (2001), Carter and Jennings (2002,
2004), Vachon and Klassen (2006), Zhu and Sarkis (2006), and Zhu et al. (2007), focuses on a specific industry, such as the manufacturing industry (e.g. Carter and Dresner, 2001) or the automobile industry (Zhu et al., 2007). Nevertheless, drivers of RPSM practices have been found to differ significantly between industries (Zhu and Sarkis, 2006), but this is ignored in many studies.

Table 3 - Drivers of Responsible Purchasing and Supply Management

<table>
<thead>
<tr>
<th>Drivers of responsible supply chains</th>
<th>Reference</th>
<th>Methodology</th>
<th>Social</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top management support and values</td>
<td>Carter and Jennings 2004</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Salam 2009</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lee 2008</td>
<td>Survey / questionnaire</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Park and Stoel 2005</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drumwright 1994</td>
<td>Qualitative / Interviews</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Organisational values</td>
<td>Walker et al. 2008</td>
<td>Qualitative / Interviews</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Zhu and Sarkis 2006</td>
<td>Survey / questionnaire</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Zhu et al. 2008</td>
<td>Survey / questionnaire</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Carter and Jennings 2004</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carter and Jennings 2002</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Razaque and Hwee (2002)</td>
<td>Survey / questionnaire</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Employees</td>
<td>Carter and Jennings 2004</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Salam 2009</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Carter and Jennings 2002</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Park and Stoel 2005</td>
<td>Survey / Questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Policy entrepreneurs</td>
<td>Drumwright 1994</td>
<td>Qualitative / Interviews</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Part of the firm’s strategy</td>
<td>Lamming and Hampson 1996</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Cost reductions</td>
<td>Green et al. 1996</td>
<td>Case study / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lamming and Hampson 1996</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carter and Dresner 2001</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worthington et al. 2008</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zhu and Sarkis 2006</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Product/process quality</td>
<td>Lamming and Hampson 1996</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>improvements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce risk to negative</td>
<td>Welford and Frost 2006</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>media attention</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm Size</td>
<td>Min and Galle 2001</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government / Regulatory</td>
<td>Carter and Jennings 2004</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>/ Legislation</td>
<td>Salam 2009</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lee 2008</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walker et al. 2008</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green et al. 1996</td>
<td>Case study / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Worthington et al. 2008</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zhu and Sarkis 2006</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hall 2000</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Min and Galle 2001</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Customer expectations and</td>
<td>Lamming and Hampson 1996</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>demands</td>
<td>Carter and Jennings 2004</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>
Barriers to responsible purchasing and supply management

Introduction. Even though RPSM has received considerable attention in recent years, and there is a set of strong drivers such as stakeholder pressure and strategic considerations, purchasing and supply chain professionals still face a number of challenges for implementing
responsible business practices into the supply chain.

The purpose of this section is to review the barriers that hinder successful implementation of RPSM practices. The existing literature highlights two main barriers: resources and culture. Firstly, managers are often constrained by resources, and investment into RPSM is not a priority (Murphy and Poist, 1995). Secondly, there is a set of cultural barriers, both country culture (Fisher and Bonn, 2007; Christie et al., 2003) and internal organisational culture (Cooper et al., 2000; Badenhorst, 1994), which create challenges and implications for managers when attempting to implement responsible practices into the supply chain. These two barriers will be further discussed below. In extension to these two issues, specific buyer-supplier elements and features, including power-dependency and trust, may also pose significant problems for the implementation and engagement with RPSM, and these issues will also be considered at the end of this section.

A table of the main barriers to RPSM as identified in the literature can be found at the end of this section, in table 4.

**Resources.** From the resource-based view (Barney, 1986; Wernerfelt, 1984), the key to the performance and the behaviour of firms, is their resources and competences, whether these are tangible or intangible. Many of the barriers to RPSM can be explained through this perspective. Resources, or the lack of, pose a barrier because it can be difficult for managers to justify and estimate the benefits of RPSM. Indeed, Preuss (2005a) found that supply chain managers were often reluctant to invest in environmentally responsible supply chain processes because of the cost involved and the uncertainty of the benefits that can be gained. This is partly because many of the benefits are intangible, but also because there is a lack of evidence regarding the link between responsible supply chain performance and firm performance.

Curkovic and Sroufe (2007) suggest that firms should consider four different types of costs with respect to their environmental supply chain initiatives: direct costs, hidden costs, contingent liability costs, and less tangible costs. Direct costs are the costs associated with building an environmental (or social) supply chain, and include asset-specific investments to
improve environmental performance. Hidden costs are costs that are related to monitoring, education and training, legal support and regulatory compliance. Contingent liability costs are the cost to the firm resulting from waste and material management, and include accidental release and cost of legal damages. Finally, less tangible costs are costs associated with harm to the brand image of the firm, goodwill and customer acceptance.

Although the existing empirical research on the relationship between resources and RPSM practices is limited, it has consistently shown that top managers focus on bottom-line accounting principles and that the perceived costs of implementing RPSM practices prevent firms from investing in RPSM. For example, Welford and Frost (2006) found that CSR managers in Asia were often constrained by budget and qualified staff to ensure socially responsible practices in their manufacturing plants. The findings of Murphy and Poist (1995) and Cote et al. (2008) show that small-medium businesses often find it difficult to allocate financial and, in particular, time resources to RPSM activities. Curkovic and Sroufe (2007) interviewed eleven companies in the US, and found that the main barrier to environmental supply chain initiatives was appropriate cost assessment. Their findings show that firms estimate direct costs of environmental initiatives, but they strongly fail to assess the less tangible costs and benefits that can be gained from responsible behaviour. These findings indicate that engaging in responsible business practices are costly, or at least are being perceived as being relatively costly compared to their benefits.

Competition has also been argued to drive out ethical practices, and Cooper et al.’s (2000) findings show that intense competition causes managers to focus on bottom-line principles. In competitive markets, firms are thus more concerned with their economic responsibility, rather than their social responsibilities. Although a focus on costs and bottom-line accounting is associated with the lack of excess resources, it also relates to the attitudes of the organisations, as will be discussed further in the next section.

The main resource barrier to RPSM therefore appears to be related to the lack of firms’ financial resources, and empirical evidence has verified this (Lamming and Hampson, 1996; Walker et al., 2008). Min and Galle (1997) even suggested that the most critical issue for
environmental purchasing was the related costs.

In addition to the lack of appropriate resources, it has also been argued that organisational culture and priorities hinder RPSM implementation.

*Organisational culture.* As noted earlier, RPSM practices are highly dependent on top management support. Managers however may be inclined to engage in unethical practices, partly because they are often personally motivated by promotion and pay increases to maximize the profit of the firm, and may neglect ethical standpoints in favour of financial awards (Minkes et al., 1999). This poses a problem for devoting resources to RPSM, since the level of social and environmental responsibility is dependent on the management’s affirmative and voluntary responsibilities (Swanson, 1999). The lack of supportive organisational values and top management support can therefore cause managers to neglect their ethical standpoint and focus more on traditional purchasing criteria of cost and quality, rather than the social and environmental performance of the supplier (Cooper et al., 2000).

Critics of CSR claim that managers are not trained to deal with socially responsible issues (Friedman, 1970; Freeman and Liedtka, 1991; Henderson, 2001). This, in particular, appears to be a problem for supply chain managers as argued by Maignan et al. (2002), as they often lack the knowledge to “correctly and systematically” include socially responsible issues into their purchasing activities (Maignan et al. 2002, p. 641). Elkington (1997) and Jamali (2006) acknowledged that social responsibility may be constrained by a strong organisational emphasis on financial targets and argue that managers should use triple bottom-line accounting principles, as opposed to more traditional accounting methods that only focus on bottom-line figures. In general, a corporate focus on costs has been found, both qualitatively and quantitatively, by many researchers to be an implication for incorporating responsible initiatives into the supply chain (Bowen et al., 2001; Min and Galle, 1997; Welford and Frost, 2006; Walker et al., 2008).

According to Cambra-Fierro et al. (2008) the corporate values of the organisation do not only influence employees’ behaviour within the company, but also in the company’s external
environment, such as their supply chain. Managers therefore need to recognise that the establishment of the company’s values influences the behaviour of the employees in both the internal and external work environment. In addition, company size may influence the ethical behaviours of the buying personnel, since large firms tend to have more anonymous and impersonal features than small family-controlled businesses, which in turn causes problems for inducing ethical behaviour into the employee base (Cambra-Fierro et al., 2008).

Implementing responsible practices into the supply chain may also be difficult for purchasing managers, as they are responsible for the external management of the companies’ resources, and competitive environments may cause procurement managers to deviate from ethical stances (Razzaque and Hwee, 2002). Moreover, the purchasing and supply chain function has often been neglected from the overall corporate vision, causing the purchasing role to be low-paid and undervalued. At the same time purchasing personnel are often pressured to reduce the organisation’s overheads, and these factors may cause unethical practices at the purchasing interface (Badenhorst, 1994; Wood, 1995).

Cooper et al. (1997) examined ethical issues in the purchasing and supply chain function of UK firms, along with the support and challenges for implementing RPSM practices. They use a two-stage questionnaire and surveyed 133 members and associated members of the Charted Institute of Purchasing and Supply (CIPS). Their findings show that the lack of training and guidance and a strong corporate emphasis on financial targets were among the greatest challenges for the implementation of RPSM processes. Similarly, evidence from the Department of Trade and Industry revealed that 83% of UK purchasing professionals, were told to focus on traditional purchasing criteria of price and supply security at the expense of environmental and social impact (O’Brien, 2003).

Through a case study approach, Cambra-Fierro et al. (2008) found that firms’ internal values influence employees’ behaviour in both the work environment and also in the global environment. Thus, the implication of a strong focus on cost could lead to questionable and unethical business practices in the supply chain. Similarly, Razzaque and Hwee (2002) found, through a quantitative study of 109 Singaporean purchasing professionals, that the
organisational culture had a large and significant influence on the purchasing personnel’s view of ethical issues, and it was found that age, religion and education also influenced the purchasing managers’ views of ethical issues (Razzaque and Hwee 2002). Baker et al. (2006), who surveyed 489 purchasing managers in the US, show that corporate values do indirectly influence the ethical behaviour, in terms of bribery and corruption, of purchasing managers. Similarly, Zhu et al. (2007) found, in the Chinese context, that firms that had a supportive organisational environment had a greater propensity to engage in environmentally responsible supply chain practices.

*Country culture.* Country cultures pose another significant barrier for international business activities. There have been several studies which have attempted to classify cultural characteristics between countries. Hall (1976) distinguished between low- and high-context cultures. In high-context countries, such as newly industrial Asian countries and most European countries, non-verbal behaviour plays an important role, whereas in low-context countries, such as the US and Australia, “intentions are expressed verbally” (Johansson, 2006, p. 66). Hofstede (1980) classified countries’ cultural characteristics on four dimensions: individualism versus collectivism, high versus low power distance, masculine versus feminine, and the level of uncertainty avoidance. By considering Hall’s (1976) and Hofstede’s (1980) mapping of various countries, cultural variation becomes apparent across nations and this may influence perceptions and attitudes of environmental and social responsibilities. Supply chain managers should therefore appreciate the institutionalised cultural factors, as these can influence ethical activities and practices of an organisation, and such diversifications can create implications for managers and their relationship with suppliers (Samiee and Walters, 2006).

Country culture has a significant impact on RPSM, as purchasing and supply chain management extends beyond the dealing of goods and data, and also includes the management of “cultural and ethical issues” (Kidd et al. 2003, p. 259). Therefore the management of RPSM issues requires the acknowledgement of diverse institutional frameworks. In addition, RPSM issues and the concept of CSR are highly context and culturally dependent, and due to their ambiguity, their interpretation depends on the underlying framework of values that guide
individuals’ and managers’ behaviour and attitudes (see for example Christie et al., 2003). RPSM may therefore not be generally applicable, but should be contextualised for its purpose and cultural setting. In particular cultural institutions may have an impact on how socially and environmentally responsible practices should be employed (Lu et al., 1999). Consequently, what is considered to be appropriate RPSM in developed countries may not be similar to that in developing countries (see for example Winstanley et al., 2002). Therefore, MNEs need to understand the local community in terms of “historical and institutional dynamics” for successful implementation of socially responsible practices (Bird and Smucker, 2007, p. 1).

Husted and Allen (2006) consider firms’ strategies of CSR in relation to whether they pursue global CSR processes or design local CSR processes. In their paper, they argue that companies must consider their CSR practices in a similar manner to that of their product market strategy. They should therefore either use a global or a local CSR strategy, but the market strategy and CSR strategy do not have to be the same, as it depends on the cultural context. In their paper, “local” CSR is concerned with the local obligations to local stakeholders, in contrast to “global” CSR which deals with the firm’s obligations to the entire society in which it operates.

Several empirical studies have also examined how cultural beliefs and values influence the perceptions of both trust and ethical behaviour (Elahee et al., 2002; Christie et al., 2003; Ueltschy et al., 2007). This research emphasises that international supply chain activities go beyond economic business transactions, because different cultures and traditions, of both the buyer and supplier country, prevent the international purchasing and supply chain function from being a pure economic transaction. For example, Christie et al. (2003) examined the effect of national culture, in terms of Hofstede’s framework, on ethical perception. Their survey, based on the responses of 345 MBA students in India, Korea and South Korea, found that there were significant differences in managers’ ethical perception depending on their culture. In addition, there is some evidence to suggest that trust is a facilitator of RPSM practices (Vachon and Klassen, 2006; Welford and Frost, 2006), and cultural differences pose a significant implication for trust-building (Smagalla, 2004; Ueltschy et al., 2007).

In a multinational comparison study on ethical issues, help and challenges in purchasing and
supply management, Cooper et al. (2000) found that offering or soliciting payment was one of the main ethical issues for purchasing professionals in India, whereas the most important issue among Western purchasing professionals was preferential treatment towards certain suppliers.

National culture can therefore be a major barrier to RPSM processes, as the emphasis on ethical issues varies greatly. This in turn creates problems for transmitting responsible purchasing and supply chain practices into cross-country and international supply chains.

**Buyer-supplier issues.** There are also other factors pertaining to the buyer-supplier relationship that can influence firms’ RPSM implementations, including buyer power. Supply chain power and purchasing power have been defined as, respectively: “the capacity to optimise the behaviour of suppliers and subcontractors in accordance with desired performance objectives” and “the capacity to achieve a successful negotiated contractual outcome on behalf of an organisation” (Stannack, 1996, p. 51). Power can therefore be “ethically controversial when motivated by narrow interests or a one-sided set of values while ignoring the rights and interest of others” (Munson et al., 1999, p. 56), which in turn has implications for the responsible management of the supply chain. In some instances, however, asymmetric interdependence, i.e. where the buyer has relatively greater power within the supply chain, has been suggested to assist the implementation of socially and environmentally responsible practices (Walton et al., 1998; Hall, 2001). Carter and Rogers (2008) and Preuss (2001) both argue that the potential for building RPSM processes are greater when the buyer has more supply chain power compared to the supplier. The benefits to society as a whole will arguably also be greater if the buyer has more power, because if the buyer can encourage, or “force” suppliers to behave responsibly, then a multiplier effect of responsible practices will be created (Preuss, 2001). Therefore, the lack of power (Preuss, 2001), and trust and collaboration (Boyd et al., 2007) can present a significant barrier to the successful implementation of RPSM.

**Summary.** One of the main barriers to RPSM are the actual and perceived costs associated with implementing such processes into the supply chain. This is in particular true for small to
medium sized firms, who do not have the time or financial resources to engage in RPSM. In addition, organisational culture is a major barrier to RPSM. Often firms focus on profits and cannot justify RPSM investment. In addition, empirical evidence has shown that a lack of top management support and training causes firms to neglect RPSM. Finally, national culture and “different ways of doing business” have also been identified as a key barrier to RPSM. Differences in legislative and institutional frameworks also cause suppliers in different countries to have diverse attitudes and emphasis on RPSM issues.

Many of the methodological limitations, which were discussed in the previous summary section, are also applicable to the existing research that has studied barriers to RPSM practices. There is therefore a tendency to focus on firms from particular industries, and on firms that are already perceived to be proactive in the field of responsible sourcing (e.g. Carter, 2000; Carter and Dresner, 2001; Min and Galle, 1997). In addition, the studies that consider cross-country issues of RPSM look at different attitudes towards RPSM, rather than assessing how practices may vary across countries, and how institutional frameworks, empirically, may present a barrier to implementing RPSM.
## Table 4 - Barriers to Responsible Purchasing and Supply Management

<table>
<thead>
<tr>
<th>Barriers to RPSM practices</th>
<th>Reference</th>
<th>Methodology</th>
<th>Social</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>Min and Galle 1997</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Murphy and Poist 1995</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Walker et al. 2008</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Welford and Frost 2006</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Bowen et al. 2001</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Focus on bottom line</td>
<td>Cooper et al. 2000</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lack of management support</td>
<td>Murphy and Poist 1995</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cooper et al. 2000</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Drumwright 1994</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lack of resources</td>
<td>Murphy and Poist 1995</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lack of training</td>
<td>Cooper et al. 2000</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Welford and Frost 2006</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Carter 2000</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carter and Dresner 2001</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Limited awareness of external drivers</td>
<td>Welford and Frost 2006</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>Samiee and Walters 2006</td>
<td>Survey</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ladron de Guevara et al. 2006</td>
<td>Survey</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elahee et al. 2002</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Christie et al. 2003</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carter and Jennings 2002</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Coordination with suppliers</td>
<td>Walton et al. 1998</td>
<td>Qualitative / Interviews</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Supplier resistance</td>
<td>Murphy and Poist 1995</td>
<td>Survey / questionnaire</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

*(Table format adapted from Walker et al. 2008)*
2.3.4. Implementation

Introduction

The purpose of this section is to review the literature that is concerned with how social and environmental initiatives are being implemented into the purchasing and supply chain operations of the firm. In line with the intentions of this literature review and thesis, the focus is on the buyer-supplier relationship, rather than the entire supply chain. Therefore, this review section will not consider such methods as total quality management (Klassen and McLaughlin, 1993; Porter and van der Linde, 1995), lean supply chain management (Rothenberg et al., 2001; Simpson and Power, 2005; Kleindorfer et al., 2005), reverse logistics (Wu and Dunn, 1995; Guide Jr and Van Wassenhove, 2002; Chan, 2007), life cycle assessment (Stewart et al., 1999; Beaman, 1999; Hagelaar and van der Vorst, 2004), and product stewardship (Michaelis, 1995; Verghese and Lewis, 2007) (see also Srivastava, 2007). The focus is simply on implementing social and environmental standards at the buyer-supplier level. This section will discuss the use of codes of conduct, monitoring and third-party certification in implementing responsible purchasing and supply chain management practices. However, it is worth noting that, on an empirical note, research has consistently shown that firms’ RPSM initiatives are limited to reactive processes, and are only undertaken to achieve legitimacy from stakeholders (e.g. Min and Galle, 1997; Preuss, 2001). This, in turn, raises serious questions about the viability of the implementation approaches discussed below.

Codes of conduct, monitoring and third-party certification

Codes of conduct are by far the most common way of implementing, ensuring and extending CSR practices along the supply chain (Kolk and van Tulder, 2002; Murphy and Poist, 2002; Neef, 2004). One definition of codes of conduct is that they are “...voluntary measure[s] taken by a private sector firm to impact upon some aspect of their labour conditions and workforce [...]”, and are often responses to external pressures (Pearson and Seyfang, 2001, p. 52). These “documents specifically address CSR issues in supply chains” that are both social and environmental in nature (Preuss, 2009, p. 736), and set out buyers’ expectations of suppliers’
responsible behaviour. Beyond being merely written rules, codes of conduct can also provide
guidance to employees; maintain coherent standards; provide encouragement and support; and
enhance firms’ reputation, and thus be a source of competitive advantage (Pedersen and
Andersen, 2006; Preuss, 2009).

Implementing codes of conduct, however, does have several implications. In broad terms these
implications fall under the headings of; 1) compliance issues; 2) failing to deal with
underlying problems; and 3) lack of monitoring efforts. Pedersen and Andersen (2006) argue
that the main problem for implementation of codes of conduct is an issue of agency and non-
compliance, due to lack of commitment from both buyers and suppliers. Part of the reason for
non-compliance issues is the fact that supply chains are often separated on several levels,
including geographically and culturally (Pedersen and Andersen, 2006). Kolk and Van Tulder
(2002) also acknowledge the non-compliance problem of codes of conduct, but also argue that
their failure is due to the fact that codes of conduct fail to deal with the underlying problems of
the supplier and supply chain. Suppliers are often expected to undertake the necessary
investment that is required to meet the buyers’ social and environmental requirements. In
particular this is true when power asymmetries in the relationship favour the buyers and as
such can “force” suppliers to make adjustments to their manufacturing processes (Millington,
2008). For example, buyers may require a certain level of social responsibility performance
from the suppliers, such as appropriate labour conditions and working hours. This, in turn,
may lead to situations where suppliers’ employees work less and get paid more, but also have
to work much harder in a shorter period of time, and where the expectations of the employees
are much greater (Yu, 2008). Therefore, codes of conduct often fail because they are merely
written requirements that do not deal with the underlying factors and which only create
friction between buyers, suppliers and their respective employees. Finally, it is often argued
that codes of conduct fail to be successful because firms fail systematically to monitor and
implement their written requirements, and as such fail to improve or implement any social or
environmental supply chain initiative (Egels-Zanden, 2007; Jenkins, 2001). Furthermore, any
monitoring efforts by the buyer tend to focus on the traditional decision criteria such as
economic aspects, production time and reliability, which means that social and environmental
criteria are often not included in monitoring procedures (Yu, 2008). In addition, there are also
problems with regards to monitoring and evaluation processes themselves (Pearson and Seyfang, 2001). In Asia, for example, the auditing industry is highly competitive and auditors trade-off auditing quality for the number of companies they can visit, and companies (suppliers), often successfully, try to conceal their wrongdoings (Welford and Frost, 2006).

Nevertheless, the literature also provides a number of suggestions to overcome these problems. In particular the prescriptive work of Pedersen and Andersen (2006) offers some guidance to the successful and effective implementation of codes of conduct. The emphasis of their work lies in their belief that non-compliance issues exist due to a principal-agent problem, which can be overcome by appropriate incentives and penalties. Kolk et al. (1999) also acknowledge the role of incentives and penalties in implementing codes of conduct, and observe that codes of conduct often ignore the inclusion of rewards (penalties) systems for compliance (failure) of codes of conduct (see also Kolk and Van Tulder, 2002). Pedersen and Andersen (2006) argue that firms can increase the likelihood of supplier compliance, through the use of trust; third-party intervention; goal congruence; reputation effects; and direct sanctions. Trust between the buyer and supplier can be an efficient safeguard as it can reduce the cost of monitoring (Pedersen and Andersen, 2006). Similarly, trust has been identified as an important factor in improving performance in the supply chain (Forslund and Jonsson, 2009) and developing supplier capabilities (Humphreys et al., 2004). Related to trust are reputation effects, and effective implementation of codes of conduct calls for buyers to establish a reputation as being tough on non-compliance issues, but also a reputation for rewarding suppliers for compliance through future orders (Pedersen and Andersen, 2006). Direct sanctions should also be used as a penalty for non-compliance. Nevertheless, despite the importance of sanctions and penalties in overcoming the principal-agent problem, consequences of non-compliance are often ignored in codes of conduct (Kolk et al., 1999; Kolk and Van Tulder, 2002; Pedersen and Andersen, 2006, p.232).

Similar to the suggestions of Pedersen and Andersen (2006), Lim and Phillips (2008) argue that the solution to the effective implementation of codes of conduct lies in the interaction between the buyer and supplier. They suggest that buyers and suppliers should move from arm’s-length, and purely transactional, relationships towards collaborative and partnership
relationships in which the buyer enters into long-term contracts with suppliers in order to encourage social and environmental initiatives. At the core of this relationship, and as originator of any CSR efforts, is the existence of mutual benefits, and over time socially and environmentally responsible business practices become a norm in the relationship and between the buyer and supplier.

Although RPSM has received considerable attention in recent years, and codes of conduct are the primary means of implementing such practices (Kolk and van Tulder, 2002), many firms still neglect their social and environmental responsibilities within the supply chain. For example, Preuss (2009) notes that only 44% of FTSE100 companies have adopted an ethical sourcing code and the content of these codes focuses more on social rather than environmental issues. In examining the content of codes of conduct among FTSE100 firms, Preuss (2009) notes that most firms (61% of the 44% which have supplier codes of conduct) encourage social and environmental initiatives in their suppliers – there is however no mention of what “encouragement” means. 52% have monitoring and auditing processes in place and 44% claim they will terminate their supplier relationships if they cannot improve their corporate social responsibility standards to the buyer requirements. 18% and 16% of the sample have management systems for environmental and social changes in place and provide training for employees, respectively.

Other studies have also shown that CSR in the context of the supply chain is often neglected in the content of codes of conduct. Welford (2005) examined codes of conduct among 12 countries, with a focus on the 20 leading companies in each country, and found that general CSR polices were rarely transmitted to the supply chain. Kolk and van Tulder (2002a) focus on child labour issues and consider codes of conduct among MNEs, business associations, government authorities and non-government authorities. Their observations revealed that codes of conduct often neglect issues of child labour and that their content along with any monitoring procedures were very vague. Hence, Kolk and van Tulder (2002a) note that any codes of conduct must be supplemented by other CSR initiatives in the supply chain. Kolk and van Tulder (2002b) also found, through interviews with six opinion leaders of six MNEs that the content of codes of conduct depended on the nationality of the buyer firm. For example,
European firms preferred broader codes of conduct and to have relatively clear monitoring processes. In contrast, American firms preferred specific codes of conduct, but had comparatively vague processes in place to ensure supplier compliance. Consistently, however, all respondents said that codes of conduct must be revised for the cultural context in which they are used. Firms therefore need to acknowledge the individual country’s legal and institutional frameworks in designing their supplier codes of conduct.

Jiang (2009) surveyed suppliers from developing countries and found that if buyers want to ensure supplier compliance with codes of conduct, then the buying firm needs to develop close relationship ties with suppliers. Relying on market governance and thereby taking an arm’s-length approach to the supplier relationship and using power to implement codes of conduct does not improve supplier compliance. In contrast, having relationships with suppliers that are built on open and honest communication improves the supplier’s compliance with codes of conduct. Finally, Jiang (2009, p. 88) noted that unfair buying practices that focus on “tough lead times and squeezing prices” are associated with low pay and poor working conditions. This final point reinforces the role that purchasing and supply chain personnel have in shaping and causing irresponsible behaviour in suppliers. Therefore, as a starting point for implementing codes of conduct is the appropriate social and environmental behaviour of individual buyers which are representing the firm.

Egels-Zanden (2007) examined the compliance practices of nine Chinese toy suppliers, by interviewing 108 employees. These interviews were unannounced and were conducted by a third-party. The findings showed that all nine suppliers breached the buyers’ social and environmental requirements, which were set out in the codes of conduct. The main reason for non-compliance was that monitoring processes did not focus on the operational unit(s) of the firm, and the suppliers successfully deceived auditors. Yu (2008) also considered codes of conduct with respect to labour practices in Reebok in China. Her findings showed that despite Reebok’s extensive code of conduct, Chinese suppliers did not comply with Reebok’s requirements. Non-compliance issues occurred because the suppliers found it difficult to achieve the required labour standards. In addition it was the sole obligation of the supplier to make the necessary adjustments to meet the requirements of Reebok. Reebok, for example, did
not financially assist the supplier in implementing necessary processes that would create compliance with the codes of conduct.

As mentioned, codes of conduct are often not sufficient to ensure responsible business practices in the supply chain and often firms need to undertake some type of monitoring and auditing to ensure and verify RPSM procedures. Locke et al. (2007b) consider the effect of monitoring on labour standards amongst suppliers to Nike. Their findings showed that monitoring on its own was not sufficient to ensure supplier compliance of Nike’s CSR requirements. Rather, it is influenced by the characteristics of the sourcing country, the factory and the relationship the suppliers have with Nike. For example, if suppliers were a strategic partner, or had dealt with Nike for a long period, their labour standards performance was comparatively better. Despite that, the labour standards requirement of Nike was the same amongst both suppliers.

Locke et al. (2007a) examined two Mexican suppliers and their socially responsible performance in relation to their relationship with Nike Inc. One of the suppliers had a highly collaborative and strategic partnership with Nike, in contrast to the other which had an arm’s-length relationship, and primarily sought to offer Nike the lowest costs of the goods sold. The case study by Locke et al. (2007a) verifies the study of Locke et al. (2007b), as it demonstrates that the characteristics of the relationship between buyer and supplier are a strong determinant of the level of socially responsible processes in the supply chain. The findings of Locke et al. (2007a) are in line with previous research by Frenkel and Scott (2002), who use a similar methodology and examine suppliers of Adidas. They found that collaborative relationships between the buyer and supplier can lead to further improvements of labour standards, as compared to introducing stand-alone codes of conduct. Similarly to Locke et al. (2007b), Lim and Phillips (2008) consider Nike’s codes of conduct and their monitoring efforts, and suggest that collaborative efforts to improve the social and environmental performance of the supplier are essential, as the introduction of codes of conduct may only create superficial responsible practices on the part of the supplier. Nike initially implemented codes of conduct into its supply chain, but as noted by Lim and Phillips (2008) these were not successful because Nike adopted a market-orientated approach to its suppliers’ CSR performance. The
recommendation of Locke et al. (2007b) and Lim and Phillips (2008) are therefore that firms, which seek to implement codes of conduct into the supply chain, should engage in collaborative partnerships with their suppliers. At the same time, firms should offer incentives to the supplier for improving their performance, such as long-term, secure production orders (Lim and Phillips, 2008), which is in line with the conceptual model of Pedersen and Andersen (2006).

Overall, the evidence on implementing codes of conduct is fairly consistent, and suggests that companies should consider a procedural justice approach by which they communicate codes of conduct to suppliers and assist them in implementing them (Boyd et al., 2007). Employing different processes, such as relying on power, may not improve the supplier propensity to comply with codes of conduct, as observed by Jiang (2009), and monitoring alone may only create a “chain bully” rather than a “chain champion”, which will not foster, or indeed create, long-term and responsible supply chains (Boyd et al., 2007).

A final aspect of codes of conduct, which is also included in Pedersen and Andersen’s (2006) model, is third-party certification. Third-party intervention is often used in RPSM, in terms of certification and auditing processes. Third-party certifications, such as the International Organization for Standardization (ISO), Sedex, Ethical Trading Initiative (ETI) or SA 8000 certificates, are often used as alternatives to codes of conduct. They are arguably more rigorous, as they make it easier to compare social and environmental responsible performance across companies and supply chains (Boyd et al., 2005, 2007). One system to implement environmental practices is by the adaptation of the environmental management standard system, ISO 14000 series; however, these certificates do not consider issues on purchasing and supply chain activities (Chen, 2005). In addition, ISO 14001 certification does not set out any specific standards for environmental performance, but rather certifies that the firm has an environmental management system (EMS) in place, which seeks to improve firms’ environmental performance. Therefore, the requirements for the certificate depend on the individual firm. However, designing an environmental management system for ISO 14000 certification is costly and time-consuming, and it is a process that requires continual attention. In addition, the economic benefit of ISO 14000 certification may not be clear, and where it is
intended to respond to institutional pressure it may in fact cause increased scrutiny (Bansal and Bogner, 2002). This also appears to be the case with regards to social responsibility and labour condition issues, as noted by Winstanley et al. (2002), as many MNEs, such as Nike and Gap, come under increased scrutiny despite having extensive codes of conduct.

With respect to socially responsible certification, companies can be certified to the Ethical Trading Initiative or SA 8000 certification. Under ETI and SA 8000 several requirements are made of the company, including issues of child labour, labour practices, human rights, racism, discrimination and wages, but there may be several cultural issues that limit the implementation of such certification (Rohitratana, 2002). The importance of social issues for organisations are best described by reviewing the number of SA 8000 accreditations that have been given in recent years; see figure 7, which illustrates the dramatic increase in SA8000 certified companies.

Figure 7 - Number of SA8000 Certifications, 1998-2008

![Graph showing the dramatic increase in SA8000 certifications from 1998 to 2008.](Source: www.saasaccreditation.org)

In addition, in order to deal with the increasing scrutiny of social responsibility practices by organisations, a new certificate (ISO 26000) addressing the issue of corporate social responsibility is expected to be published in 2010. However, Castka and Balzarova (2008) consider the conditions under which a firm will certify to ISO 26000, and argue that most of these motives are self-interested and concede that companies will only certify to ISO 26000 in order to avoid further legislation. This suggests that firms’ social supply chain initiatives will
be limited to reactive approaches and that they will only engage in social supply chain management for legitimacy reasons rather than discretionary and ethical reasons.

Summary

Codes of conduct are arguably the most common feature of RPSM implementation. However, on a practical level, these policies are often not translated into practice, partly due to non-compliance issues. Firms can monitor suppliers, to ensure compliance with RPSM requirements, but suppliers may successfully deceive buyers, and the auditing industry is often corrupt (Egels-Zanden, 2007; Welford and Frost, 2006). Furthermore, suppliers often find it difficult to adhere to the buyers’ RPSM requirements, because they receive little assistance from buyers.

Codes of conduct are, in particular, common for dealing with CSR issues in the supply chain. Nonetheless, often these codes of conduct have an emphasis on social issues, such as child labour and working conditions. This means that environmental issues, such as waste and recycling, are often omitted from the literature on codes of conduct. Rather, the literature that considers environmental purchasing and supply chain issues tends to focus on issues of lean supply chain management and reverse logistics, and few attempts have been made to assess how firms extend their environmental requirements down the supply chain, and to what extent firms apply environmental initiatives to the supply chain.

The majority of existing research on social supply chain issues and codes of conduct is based around case studies. Often these case studies only consider a single firm and tend to focus on MNEs (e.g. Lim and Phillips, 2008; Locke et al., 2007; Yu 2008). They tend to contribute to the literature normatively, by offering guidance and ‘best practice’ examples. However, this type of research is not applicable to firms that are not MNEs, and which may not have global supply chains, or indeed have the power to “force” suppliers to comply with their RPSM requirements.
Furthermore, little is known about the implementation of codes of conduct in developed countries, as studies have so far focused on these in the context of the developing countries. In addition, many studies seem to lack a sense of rationale for their sample selection (e.g. Yu, 2008), and with the exception of Egels-Zanden (2007) the majority of the empirical studies on implementing RPSM have been dominated by a constructivist perspective, and have thus attempted to create theory and normative perspectives by suggesting that buyers need to engage in close and collaborative relationships with their suppliers if they are to implement RPSM processes. Nevertheless such theories have only been verified qualitatively.

2.3.5. Outcomes and performance issues

Introduction

Arguably one of the most under-researched areas of responsible purchasing and supply chain management is the potential outcomes and advantages that can be gained from such practices. This section will provide an insight into the potential outcomes managers can expect when investing in RPSM. Many of the benefits (and costs) of CSR can be readily applied to the context of global purchasing and supply chain management. Although implementing RPSM can be a costly processes, such practices can arguably generate considerable advantages to the procuring firm (buyer), ranging from improved financial performance (Carter, 2005; Carter et al., 2000) to better supply chain performance (Carter, 2005; Polgreen, 2002).

Outcomes and performance issues

In the context of supply chains, companies must, in line with their general CSR processes, change and adapt to cultural and social changes in society in order to satisfy the demands of the market (Husted and Allen, 2006). As noted earlier, there are increasing demands and expectations from consumers and other stakeholders for companies to behave responsibly. Therefore, from the instrumental and legitimacy perspective, firms need to consider ethical practices in the supply chain. Part of the argument for CSR is that companies should consider it as a risk management strategy. In the long run such practices can limit their exposure to
negative media coverage and stakeholder pressure. In addition companies can seek legal legitimacy through such practices (Davis, 1973), and avoid fines and liability of unethical supply chain practices (Carter, 2000). Therefore CSR and RPSM may even be considered as a strategic necessity, because such strategies can be considered as a global brand insurance against management lapse, and can help to ensure the long-term survival of the firm (Werther and Chandler, 2005).

From an environmental supply chain perspective, Lippman (2001) notes that environmental supply chain management can result in benefits beyond environmental performance, as such activities can lead to opportunities for reducing costs and create strategic and competitive advantages. Environmental practices in the supply chain can lead to competitive advantages by adding economic value to both internal and external stakeholders, for example by lowering production costs through waste reduction and prolonged, or re-used, life of assets (Fiksel et al., 2004). In addition, environmental purchasing and supply chain management can benefit companies’ brands and reduce the risk of reputational damage (Fiksel et al., 2004). This is in line with the argument of Preuss (2002) who states that purchasing managers can gain substantial benefits by engaging in ecological initiatives, including cost advantages, improved corporate reputation and legitimacy from regulators and stakeholders.

Empirical evidence on the benefits of RPSM is limited and has yielded mixed results. Part of the reason for this is that many of the benefits, in particular for social issues, are difficult to measure and take the form of intangible factors such as improved reputation and risk reduction. The empirical evidence of the benefits of environmental purchasing and supply chain practices are therefore much stronger, but evidence on whether such practices generate “positive or negative economic performance is still mixed” (Zhu et al., 2005, p. 454). For example, Alvarez et al., (2001, also cited in Zhu et al, 2005) suggest that environmental management, including environmentally RPSM, has a positive impact on organisation’s performance. This is echoed by the findings of Rao and Holt (2005). Yet, Bowen et al. (2001) observe that environmental supply chain management is not related to economic performance, and certainly not affect short-term profitability and sales performance (also cited in Zhu et al., 2005). Green et al. (1998) argue that it is difficult to judge the extent to which environmental
supply chain management led to improved financial performance because of difficulties and variation in measurement methods for both environmental and financial performance.

The findings of Zhu et al. (2005) suggested that environmental supply chain management has a positive impact on the firm’s operational performance in terms of product quality and flexibility. Nevertheless, they found limited evidence to suggest that environmental management improved economic performance. Carter et al. (2000) examines the relationship between environmental purchasing and firm performance in terms of net income and cost of goods, as also suggested by Klassen and McLaughlin’s (1996) conceptual framework. Carter et al.’s (2000) environmental supply chain performance variable is constructed through a set of environmental supply chain performance statements, which were then completed by 437 practitioners in the consumer manufacturing industry, who were asked to rank their own environmental score. This approach however is likely to be subject to both social desirability bias and in particular common source bias. Carter et al.’s (2000) findings confirm the conceptual framework of Klassen and McLaughlin (1996) and thus showed that environmentally RPSM practices are related positively to net income and negatively to the cost of goods. Zhu and Sarkis (2004) also found a relationship between environmental supply chain management and financial performance. Later this was argued only to be true if the firm at the same time engaged in external relationship management (Zhu et al., 2007). However, Rao and Holt (2005), who based their quantitative study on 52 firms in South Asia, found that environmentally responsible production and supply chain processes result in an increased level of competitiveness in terms of efficiency, quality improvement and cost savings, and also lead to an improved economic performance in terms of sales, market share, market opportunities and profit margins. Nonetheless, similarly to the study of Carter et al. (2000), due to the methodology used by Rao and Holt (2005), their data are likely to suffer from common source bias and social desirability bias.

Focusing on socially responsible supply chain management, Carter (2005) suggested that social initiatives would improve supplier performance and subsequently reduce cost. Nevertheless, his findings suggested that social purchasing initiatives did not improve supplier performance. Social purchasing practices did however improve a firm’s organisational
learning, which in turn influenced supplier performance and subsequently improved firms’ ability to reduce supplier costs. Beyond this study, there is very little research that has examined how social supply chain practices can influence the operational and firm-level performance of the firm. Nevertheless, it has been suspected that such practices improve inter-firm relations, in particular if procedural justice approaches are followed to implement RPSM and therefore increase trust, reduce risk, and promote innovation and collaboration, which in turn will improve performance and profitability (Boyd et al., 2007; Dyer and Singh, 1998; Zhu et al., 2007). Moreover CSR in the supply chain has been argued to be important in creating a strong brand and in order to reduce risk with respect to negative media attention (Amaeshi, 2008; Roberts, 2003). Cramer (2008) suggests that suppliers should improve their social and environmental standards and adhere to Western buyers’ requirements, as such practices will improve customer (buying firm) loyalty, and suppliers are therefore likely to be rewarded with long-term contracts and better buyer-supplier relationships. Nonetheless, these statements have not been empirically assessed, and hence are only hypotheses of the outcomes of RPSM. Carter and Jennings (2002) however show that RPSM does improve the level of trust and collaboration in the buyer-supplier relationship, which ultimately improves the performance of the supplier.

Summary

Existing research has not fully considered the potential outcomes of RPSM practices in depth. This may be partly because the benefits are difficult to measure. However there have been some attempts to assess the relationship between RPSM and firm performance. Existing research has shown that RPSM activities can benefit the firm in a number of ways, among others by reducing their costs and improving their financial performance. However, applying McWilliams and Siegel’s (2000) criticism of the studies that consider the CSR-financial performance link to the work of Carter et al. (2000), it can be argued that Carter et al.’s (2000) model is misspecified as it does not include R&D or the advertising expenditure of the firm. Research has also shown that RPSM improves aspects of buyer-supplier relationships, including the level of trust and communication.
The research that has considered the outcomes and benefits of RPSM has some of the same methodological problems as discussed in previous sections. Many of the studies focus on a single industry, such as the consumer manufacturing or furniture industry (e.g. Carter and Jennings, 2002; Carter, 2005; Lamming and Hampson, 1996). In addition, the quantitative studies are likely to be subject to both social desirability bias and common source bias, because the variables depend on managers completing a self-reporting questionnaire, which is likely to result in highly biased data (Crane, 1999).

2.4. Research agenda

Introduction

Having reviewed the literature on responsible purchasing and supply chain management, this section will consider some of the key limitations of this literature and outline opportunities for further research. From the literature review it is apparent that responsible purchasing and supply management (RPSM) has increased considerably with regards to its importance in recent years, and has received significant academic attention over that time. Nevertheless, there are some shortcomings in the existing literature, partly due to the methodological issues of sampling, measurements, context and bias.

Limitations of the existing literature

As a starting point for a discussion on the limitations and opportunities for further research it is first worth considering the bibliometric account given earlier in this chapter, before moving on to the general shortcomings of the literature.

1) Lack of comparative analysis between social and environmental issues

As the bibliographical account of the existing RPSM literature showed, journal articles tend to focus on either social or environmental supply chain issues. Very little research considers both
sets of issues, and the ones that do (e.g. Carter and Jennings, 2002, 2004), still create a single variable that measures “responsible supply chain management” or “socially responsible purchasing”. There is thus no direct comparison between firms’ environmental and social supply chain efforts, and a lack of assessing both social and environmental issues through the same conceptual frameworks. Contrasting socially and environmentally RPSM practices would provide a more rigorous analysis and allow researchers to identify if there are any differences, or similarities, which in turn will assist managers in their implementation of RPSM. It would also allow policy-makers to focus on particular elements of responsible supply chain management, depending on whether they seek to promote socially or environmentally RPSM practices.

2) **Emphasis on environmental issues**

Environmentally RPSM issues have been researched to a much greater extent compared to social issues. Nonetheless, a substantial amount of the normative research highlights the importance of adhering to a range of social issues, including bribery, unfair contracting, misuse of power, deceitful behaviour, etc. (Landeros and Plank, 1996; Carter, 2000; Flech, 1985; Badenhorst, 1994; Wood, 1995). However, few studies provide empirical evidence regarding issues such as child labour, human rights, forced labour, working hours, discrimination, despite the fact that it is often these issues that can seriously damage a corporate brand and its performance (Roberts, 2003). Given this nature of the extant literature, relatively little is known about how embedded socially RPSM practices are in comparison with environmentally RPSM practices.

3) **Focus on single case studies**

Much of the existing literature is based on single case studies that attempt to offer normative and descriptive perspectives to the field of RPSM, in particular to the field of socially RPSM (e.g. Yu, 2008; Lim and Phillips, 2008; Locke and Romis, 2007; Pedersen and Andersen, 2006; Roberts, 2003; Winstanley et al., 2002). These types of research offers guidelines to practitioners on best practice and suggest how firms ought to behave in the supply chain, but
they offer little insight into the actual practice of firms’ RPSM processes, and fail to consider the contextual setting, on which RPSM may be dependent. In addition, much of the normative contribution ignores the resources of the buying firm and simply assumes that firms have the resources and capabilities to operate responsibly in the supply chain. As such, these papers do not consider the potential barriers for implementing social and environmental initiatives into the supply chain. Moreover, studies that focus on a single case tend to do so through the examination of a “successful” firm, thus giving a biased and misleading impression of RPSM practices in the typical firm.

4) **Focus on certain industries**

Much of the existing research limits itself to certain industries, such as the paper and pulp industry (Vachon and Klassen, 2006), the furniture industry (Handfield et al., 1997; Walton et al., 1998), the automobile industry (Beske et al., 2008; Zhu et al., 2007a), the food industry (Hall, 2000; Maloni and Brown, 2006), or the consumer manufacturing industry (Carter, 2000, 2004, 2005; Zhu et al., 2007, 2008). These industries are notoriously characterised as having a high environmental and/or social impact, and consequently they are likely to have relatively strong corporate reactions to such issues. Nevertheless, relatively little is known as to how these industries compare with others, or what industry factors are associated with relatively poor and good RPSM practices. There is thus a need for more cross-industry analysis of RPSM, which assesses how the industry environment influences a firm’s RPSM performance.

5) **Focus on buyers’ main suppliers**

Quantitative studies that examine RPSM practices between buyers and suppliers tend to focus on what buyers do with their main suppliers. For example, researchers might ask the participant to outline their RPSM requirements that they *tend* to have with their top 25% suppliers (e.g. Carter, 2005; Rao and Holt, 2005). However, this means that many existing quantitative studies ignore important transaction-specific factors which may influence RPSM practices. Factors pertaining to the specific buyer-supplier relationship such as trust, power, product importance and product complexity are therefore under-emphasised. The unit of
analysis for many studies are therefore at the firm level, rather than at the transaction (buyer-supplier) level.

6) **Lack of cross-country analysis**

Focusing specifically on social issues, many researchers have acknowledged the importance of examining socially RPSM issues in the context of buyers from the developed world and their relationship with suppliers from the less developed world (Krueger 2008, Roberts 2003). Nevertheless, existing research fails to assess how RPSM issues vary according to the location of the supplier from which the firm is buying.

With respect to social issues, the existing research that considers suppliers in less developed countries tends to do so qualitatively and often through a single case study. There is therefore a lack of quantitative analysis of how RPSM practices differ between countries and regions. For example, it is not known how firms deal with their Western suppliers compared to their Asian suppliers, with regards to their responsible supplier requirements and practices.

7) **Measuring responsible purchasing and supply involvement**

Social desirability bias can be a major problem in research into ethical practices (Crane, 1999; Randall and Fernandes, 1991). As noted by Crane (1999) this is particularly true for quantitative research as it tends to be based around survey instruments and questionnaires. The problem with questionnaires to assess firms’ RPSM actions is that the participants tend to claim to be ethical, because they want to be perceived as good (Crane, 1999). The existing quantitative research into RPSM does not seem to make a concerted effort to rectify this problem of social desirability bias, where the respondent will answer the survey questions in a manner that would be considered favourable by the researcher. There are, in particular, certain studies which have phrased their questions positively, thus increasing the likelihood of social desirability bias. For example, Carter (2005) asks respondents, through a self-report questionnaire: “have you as a result of undertaking socially responsible activities been able to obtain products or services from the supplier that is of higher quality?”, or “as a result of
undertaking socially responsible activities have your production costs been reduced?”. Such positively phrased questions are likely to cause the respondent to answer them favourably, as the questions themselves are insinuating a relationship between socially responsible purchasing activities and a favourable outcome.

In addition to the problem of social desirability bias, there is another problem related to mail survey and self-report questionnaires, which is that of common source bias. In many quantitative studies (e.g. Carter 2000, 2001; Carter and Jennings, 2004; Rao and Holt, 2005; Lee, 2008; Salam, 2008), the firms are asked to provide a measurement for both the dependent and independent variable, which is likely to cause the research to be subject to common rater and common source bias (Podsakoff et al., 2003). In sensitive subjects, such as RPSM, this poses a serious issue. For example, if a single respondent assesses both the dependent and independent variables, and if the relationship is of a popular belief, then the relationship between the dependent and independent variables will be subject to common method (King et al., 2007; Podsakoff et al., 2003) and social desirability bias (Crane, 1999). As such the systematic variance associated between the two variables “confounds the systematic variance associated with the traits” (Doty and Glick, 1998, p. 376).

8) **Lack of UK evidence**

With the exception of some qualitative (e.g. Hall, 2000; Lamming and Hampson, 1996; Preuss, 2001; Walker et al., 2008) and quantitative (Bowen et al., 2001) research, very little empirical, especially quantitative, research is based on data from the United Kingdom. It is therefore not known how UK-based firms deal with RPSM, and whether UK-based firms have different RPSM processes from firms based in other countries.

9) **Narrow theoretical focus**

The existing research is relatively constricted in its theoretical take on RPSM. Often researchers seek to explore the phenomena of RPSM and do not apply any specific theories to their analysis, and there is certainly no consistent theoretical view with respect to analysing
RPSM. Nonetheless a number of researchers have taken specific theoretical approaches to the study of RPSM. For example, existing research has drawn on a number of theories, including power-dependency (Amaeshi et al., 2008; Millington, 2008); agency theory (Pedersen and Andersen, 2006); attitude theory (Pagell and Wu, 2009); complexity theory (Matos and Hall, 2007); institutional theory (Darnall, 2006); resource-based view (de Bakker and Nijhof, 2002; Lee, 2008); and stakeholder theory (de Bakker and Nijhof, 2002; Maignan et al., 2002). Despite these studies, broadly speaking, researchers have failed to integrate theory with RPSM practices, and rather than apply theory or use theory to explain RPSM, much of the existing literature simply describes the nature of RPSM. A more thorough theoretical approach to RPSM may not only broaden the academic horizon, but also highlight some of the practical implications of RPSM.

10) Limited strategic perspectives

As noted in the literature review, research remains limited in understanding the extent to which RPSM can improve a firm’s operational and firm-level performance. Moreover, it has been suggested that if RPSM is to become mainstream, then such practices must be viewed from a strategic perspective, which can assist the firm in achieving competitive advantages (Bhandakar and Alvarez-Rivero, 2007). Further research is therefore needed to understand fully how socially and environmentally responsible purchasing and supply chain management assists the firm in improving its performance, through “ethical” positioning, but also through improving buyer-supplier relationships, and reducing cost and entering long-term favourable supplier deals.

The literature has extensively considered RPSM from a stakeholder perspective, and some research has also examined RPSM from an institutional and agency theory perspective. However, beyond these, a limited range of theories have been applied to the analysis of RPSM. For example, the existing research has not considered RPSM practices from a strategic management or business strategy perspective. It is however known that firms may seek strategic legitimacy from stakeholders by engaging in RPSM and that they can potentially improve their performance through such processes (Carter, 2005; Rao and Holt, 2005).
Nevertheless, the existing literature has not examined how firms’ industry environments, resources or positioning strategy influence their RPSM performance, despite the fact that the general CSR concept has been extensively considered from this strategic perspective, in particular in recent years (e.g. McWilliams and Siegel, 2001).

2.4.1. Future directions – a research agenda

In light of these critiques, this thesis will address several of these issues. Firstly, it will identify a methodology that limits common source bias and social desirability bias when “measuring” a firm’s social and environmental purchasing and supply management performance. Such an approach is likely to involve some qualitative aspects (Crane, 1999), where respondents do not assess their own RPSM performance. By identifying a method that reduces social desirability bias (which appears to be a common trait of much current research) this thesis seeks to increase the reliability and validity of a firm’s actual socially and environmentally responsible practices, rather than their desired level as often stipulated in RPSM policies.

Secondly, this research will seek to broaden the theoretical perspective of RPSM, by applying classical strategic theory to the context of RPSM. Doing so will not only broaden the theoretical perspective, but also highlight, conceptually, how firms can achieve competitive advantages through RPSM and verify, empirically, if they are indeed viewing RPSM as a strategic issue, being this driven by legitimacy motives, risk management motives or competitive positioning motives. Therefore, this research will apply theories to RPSM that have in recent years been applied extensively to the general concept of CSR. Within the general CSR literature, conceptual work has in particular striven to integrate strategic thinking into social responsibility. For example, the work of Burke and Logsdon (1996), Denchev (2004), McWilliams and Siegel (2001), Husted and Allen (2007), Porter and Kramer (2006), Sethi and Sama (1998), Siegel and Vitaliano (2007), and Van de Ven and Jeurissen (2005), seeks to integrate and make corporate social responsibility a strategic issue for firms. This research will extend these lines of strategic thought to the context of RPSM.
Given the limitations of the existing literature, there are in particular two more points that would assist further research in the field of RPSM and which will be incorporated into the methodology and the empirical research that will prevail in the following chapters. One of these points is the fact that existing research focuses on what buyers *tend* to do with their main suppliers. By so doing, earlier work (e.g. Carter, 2000, 2005; Rao and Holt, 2005) has however ignored transaction-specific characteristics. Therefore, future research should include, or at least control for, factors that pertain to the specific buyer-supplier relationship, such as power, which has been argued to be very important to the dynamics of this relationship (e.g. Cox, 1999: Millington, 2008). A second point is that many researchers, particularly when studying social issues, focus on case studies among high-profile companies such as: Nike (Locke et al., 2007), Gap (Ansett, 2007; Henkle, 2005), B&Q (Jamison, 1996), IKEA (Abukhader and Jonson, 2004; Strand, 2009), and Sony Erikson (Svensson, 2007). Alternatively, researchers focus on high-profile industries, such as the chemical (Theyel, 2001), garment (Forman and Joergensen, 2004; Kolk and van Tulder, 2002), automobile (Geffen and Rothenberg, 2000; Simpson et al., 2007), and coffee and tea industries (Blowfield, 2003). The question remains, what are the RPSM practices of both high-profile and typical firms, and do these firms consider RPSM to be a strategic issue?

### 2.5. **Summary and conclusion**

There are several things that can be concluded from this literature review. Firstly, RPSM as a phenomenon has received considerable attention in recent years. Secondly, environmental supply chain practices have received more attention than social supply chain practices. Thirdly, there appears to be a set of strong external drivers, such as customer expectations and regulation, which cause firms to engage in RPSM. Although there are internal drivers as well, such as organisational culture, and a desire to improve quality and reduce costs and risk, these drivers appear to be under-researched in the literature. Fourthly, there are mainly two sets of barriers to RPSM practices. One of them is a lack of resources, which includes financial resources; a lack of training; a lack of time; a lack of trust, power and collaboration in the supply chain. The other is cultural barriers, which can be further categorised into country/national culture and organisational culture. National culture and different institutional
frameworks can present a barrier to RPSM. Similarly, the lack of management support and organisational emphasis on bottom-line accounting is a barrier to RPSM practices. Fifthly, the most common method used to implement RPSM initiatives is through the use of codes of conduct and third-party certification. There is however a set of practical problems when it comes to implementing these. Therefore, codes of conduct need to be supplemented by appropriate monitoring and auditing processes. In addition, suppliers are much more likely to comply with buyer codes of conduct if they get assistance from the buyer in implementing its RPSM requirements, and if buyers and suppliers have close relationships. Finally, there is a set of potential outcomes that can be expected from RPSM, including improved financial performance, improved commitment from suppliers and enhanced corporate image.

There are, however, numerous limitations of the existing research, which are in particular concerned with the empirical approaches and methods used, but also in terms of narrow conceptualisation. Among the methodological limitations are issues of social desirability bias, common source bias and the scope of the existing research, which often focuses on case studies and RPSM within particular industries. Conceptually, a key gap in the literature is the lack of examining RPSM from a strategic perspective, as this is arguably important for the survival of RPSM. The existing research has neglected how strategy, market environment and resources may influence firms’ RPSM behaviour. An examination of these issues will broaden the scope of the existing RPSM literature, by considering these practices across industries and among typical firms, and also by furthering the conceptualisation of RPSM. In addition, it would further our understanding of firms’ engagement with RPSM and highlight the circumstances under which firms will engage both reactive and proactively in RPSM.

In addition, another key limitation of existing research is the fact that most studies do not consider RPSM issues at a transaction level, and many researchers do not consider how RPSM varies according to from where the firms purchase, or indeed in which market they operate.
CHAPTER 3
3. STRATEGIC MANAGEMENT AND BUSINESS STRATEGY

As noted in the previous chapter and the research agenda, this thesis will take a strategic view of responsible purchasing and supply management (RPSM) and apply classical strategic thinking to the context of RPSM. Before developing a conceptual framework, however, the literature that has dominated the strategic management and business strategy field will briefly be reviewed. Although much of this literature is nearly 50 years old, it still remains influential in more recent writing in the case of strategy literature. Furthermore, recent conceptualisation between strategic management and corporate social responsibility does indeed draw on the classical perspective of strategy.

3.1. Introduction

One of the major strategic decisions for today’s business managers is to balance their traditional obligation of maximising shareholders’ values through the establishment and sustainability of competitive advantages, while at the same time responding to a number of social and environmental issues (Porter and Kramer, 2006). Strategic management is however a complicated topic, which has been considered in the context of a number of managerial issues, including stakeholder management (Freeman, 1984); entrepreneurship (Burgelman, 1983); diversification and internationalisation (Geringer, 1989); management of intangible resources (Hall, 1992); human resources management (Wright and McMahan, 1999); and the management of social and environmental initiatives (Burke and Logsdon, 1996).

This chapter provides an overview of the strategic management and business strategy literature. This literature plays a major role in terms of understanding the strategic management perspectives of corporate social responsibility initiatives, with a particular focus on such initiatives in the purchasing and supply chain function of the firm. In giving a broad overview of strategic management this chapter focuses on two conflicting schools of thought, which recently have been synthesised, which are those of the structure-conduct-performance model and the resource-based view of the firm. Furthermore, it discusses an emerging field of
strategic management, which is that of strategy-as-practice, before arguing that classical strategic management is the most appropriate way of analysing responsible behaviour in terms of a firm’s purchasing and supply chain activities.

3.2. **Strategy and strategic management**

The last thirty years have seen a significant increase in the “output of both theoretical development and empirical research in the strategy area”, including research on international strategy, corporate strategy and business strategy (Dess et al., 1995; p. 357). Considering the scope of strategy, it is best understood as a dynamic, multi-dimensional and interdisciplinary concept, which draws on the fields of social science, economics and organisational theories (Chaffee, 1985; Whittington, 1996; Williamson, 1999, p. 1087). The concepts evolved due both to the limitations of economics to explain how firms should be managed and to a number of unrealistic assumptions, which were the foundation of many neoclassical economic models (Faulkner and Campbell 2003). Strategy and strategic management as a theory thus developed in order to assist managers in tackling complex problems “concerning the survival and prosperity of the firm” (Faulkner and Campbell 2003, p. 2).

**Table 5 - Definitions of Strategy and Strategic Management**

<table>
<thead>
<tr>
<th>Definition of strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learned et al. (1965):</td>
</tr>
<tr>
<td>“the pattern of objectives, purpose, or goals and major policies and plans for achieving these goals, stated in such a way as to define what business the company is in or is to be in and the kind of company it is or is to be”</td>
</tr>
<tr>
<td>Chandler (1973)</td>
</tr>
<tr>
<td>“the determination of the basic long-term goals and objective of an enterprise and the adaptation of courses of action and the allocation of resources necessary for carrying out these goals”</td>
</tr>
</tbody>
</table>
Quinn (1980):
“the pattern or plan that integrates an organization’s major goals, policies and action sequences into a cohesive whole. A well-formulated strategy helps to marshal and allocate an organization’s resources into a unique and viable posture based on its relative internal competences and shortcomings, anticipated changes in the environment and the continued moves by intelligent opponents”.

Hambrick and Frederickson (2005)
“the central, integrated, externally orientated concept of how a firm will achieve its objectives”.

Definition of strategic management

Fitzroy and Hulbert (2005)
“strategic management involves creating organizations that generate value in a turbulent world over a sustained period of time”.

Carpenter and Saunders (2007)
“the process by which a firm manages the formulation and implementation of its strategy”.

David (2007)
“the art and science of formulating, implementing and evaluating cross-functional decisions that enables an organisation to achieve its objectives”.

Table 5 gives a set of definitions of strategic management and strategy. As shown, most are concerned with plans and/or actions to achieve a firm’s objectives. However, many scholars do not believe in a single definition of strategy, but rather consider strategy and strategic management to be concepts that constitute several elements and stages (Chaffee, 1985; Nag et al., 2007). Mintzberg (1987) for example argued that strategy constitutes the five elements of:
a plan, a ploy, a pattern, a position and a perspective. Similarly, Nag et al. (2007) acknowledge
the ambiguity of the various interpretations of strategy and argue that if strategic management
is a theory, then as an academic field it should have a consensus meaning. In their study, they
assess the common identities of strategic management by asking a panel of strategic
management scholars to assess whether certain journal articles were related to the strategic
management or to the non-strategic management field. Subsequently they identified common
words in the articles that had been identified, by their panel, to be related to the field of
strategic management. In addition, they asked 37 strategic management scholars, from
economics, sociology, marketing and management backgrounds, to define strategic
management. Through these two methods, Nag et al. (2007) identified seven common themes
in the strategic management literature: strategic initiatives; managers and owners; resources;
performance; firms; environment; and internal organisation. Chaffee (1985) also notes that
scholars do not agree to a specific definition, but argues that there are similarities between
most definitions. Most researchers agree that firms use strategies to deal with the external
environment and that a strategy is partly a response to changes in the external environment
(Biggadike, 1981; Chaffee, 1985; Lenz, 1980). Moreover, there is a consensus that strategy is
about content, process and implementation and that the firm’s intended and realised actions
are both parts of the strategy concept (Chaffee, 1985). Nevertheless, regardless of the diversity
of definition of strategy and strategic management “…the primary objective of strategy is to
develop and support a lasting competitive advantage” (Wheelwright 1984, p. 79).

3.3. Business strategy

Business strategy is strongly related to the economics of strategy and the theory of the firm. In
particular the “classical” school of strategy has several similarities to many streams of
economics, and it has even been argued that business strategy and economics only differ
because of the “background of the principal writers and developers of the subject areas”
(Cashian, 2007, p. 7). A central distinction however is that strategy is concerned with process,
where profits are an indication of successful and efficient firms. In contrast, in economics,
profits may be perceived to be misallocation of resources (Cashian, 2007). The fundamental
issue of business strategy is therefore the process, the development, and the practice of establishing a competitive advantage through appropriate positioning among competitors in the market environment (Barney and Hesterly, 2006; Grant, 1994).

Business strategy also differs from both international strategy and corporate strategy in that it does not seek to answer what business to compete in or where to compete (Dess et al., 1995). Rather, business strategy is concerned with the appropriate positioning of a firm “among its rivals to achieve its goals” (Schendel and Hofer, 1979, p 12; see also Dess et al., 1995, p. 374). More than any other dimension of strategy, several scholars have suggested typologies of business strategy (Dess et al., 1995; Galbraith and Schendel, 1983). For example, Dess et al. (1995, p. 374) outline a number of typologies of business strategy that have been developed over the last 35 years, including: Buzzell et al.’s; (1975) building, holding and harvesting; Utterback and Abernathy’s (1975) maximising performance, maximising sale and minimising costs; Hofer and Schendel’s (1978) share increasing, growth, profit, and liquidation; Vespers’s (1979) multiplication, monopolising, specialisation and liquidation; Miles and Snow’s (1978) prospectors, defenders, analyzers and reactors; Miller and Friesen’s (1977, 1978) adaptive firm, dominant firm, giant, entrepreneur, and innovator; Wissema et al.’s (1980) explosion, expansion, continuous growth, slip, consolidation and contraction; Abel’s (1980) scope offerings, competitive differentiations, cross product-market segments; Miles and Cameron’s (1982) domain, offence and defence; Porter’s (1979) cost leadership, differentiation and niche; and Lei and Slocum’s (2005) concept drivers, pioneers, consolidators and concept learners.

In the context of business strategy and supply chain practices, it is worth considering another element of strategy, which is that of functional strategy. A functional strategy “specifies how a functional area will support a firm’s business strategy and how it will complement or support other functional strategies” (Krause et al. 2001, p. 499). In the context of the purchasing and supply chain, firms are therefore likely to have a strategy that is just concerned with how it deals with purchasing transaction and supply chain relationships. The appropriate alignment between business strategy and the functional has been argued to influence significantly a firm’s ability to achieve, and sustain, competitive advantages (e.g. Powell, 1992). For example, it has been found that the alignment between business strategy and information
systems (Sabherwal and Chan. 2001); technology policies (Zahra and Covin, 1993); manufacturing strategy (Ward and Duray, 2000); human resource practices (Bird and Beechler, 1995); can significantly improve a firm’s performance. Similarly, the failure to align the functional purchasing and supply chain strategy with that of the overall business strategy can have significant implications for firms’ performance (Baier et al. 2008).

3.3.1. Competitive advantage and generic strategies

As noted, a number of business strategy typologies have been proposed, but there are in particular two strategic typologies, which have received considerable attention: Miles and Snow’s (1978) organisational structures and Porter’s (1980) generic strategies.

Miles and Snow (1978) found that the way firms dealt with their market and organisational environments differed greatly, and proposed four strategic types of organisational structure: prospector, defender, analyser and reactor. “Prospectors” operate in a dynamic market environment and are constantly analysing the market in order to exploit any opportunities. However, “prospectors” also operate in a highly uncertain and risky environment, which in turn has consequences for the performance of these firms. “Defenders” are traditional and conservative firms that operate in a relatively stable environment, and focus on penetrating existing markets, rather than exploring new market opportunities. “Analysers”, share the traits of “defenders” and “prospects”, as they have product lines in stable environments, but also seek to diversify and grow through product and market innovation. Therefore, “analysers” seek new opportunities from the external environment, but at the same time continue to focus on penetrating their existing market, and are thus hedging their innovative strategies with established product market strategies. According to Miles and Snow (1978) only these three strategies can create a sustainable competitive advantage, as “reactors” have no clear strategy and do not respond to the market environment. “Reactors” are therefore likely to be firms that are at the end of their product life cycle, but with no intention of re-inventing their product (see also Miles et al., 1978; Hambrick, 1983).
Porter’s (1980) generic strategies are based on cross-industry observations, and are undoubtedly the strategic typology which has been subject to the most empirical testing (e.g. Dess et al., 1995; Miller, 1988; Miller and Dess, 1993). Porter (1980) identified three generic strategies of the firm: cost leadership, differentiation and focus (niche). Although he identified three generic strategies, he only acknowledged two forms of competitive advantage: low-cost and differentiation. Therefore, a niche strategy may encompass either a low-cost or a differentiation strategy, but targeting a small market, i.e. narrow target market breadth, is not a competitive strategy in itself. The low cost (cost leaders) strategy emphasises efficiency of production. Under this strategy the aim of firms is to produce a product/service that is priced below that of competitors’ offers. In contrast, a differentiation strategy is concerned with producing a product/service that is perceived as unique compared to competitors’ products. Firms can produce a unique product either through brand image, reputation, technology, or some kind of tangible or intangible attribute which competitors cannot readily replicate. If firms are successful in differentiating their product, they can then achieve a competitive advantage and charge consumers a premium price for their unique product. Porter (1980) argued that firms, on the grounds of an external environment analysis, should only pursue one of the three generic strategies and suggested that the strategies were mutually exclusive, since the methods that are used in each strategy to achieve abnormal returns are inconsistent and conflicting with one another. For example, it would not be viable for a firm to pursue a combined low-cost and a differentiation strategy, because low cost focuses on offering the product at the lowest possible price, whilst a differentiation strategy typically involves some additional attributes that are costly to provide. The two strategies can therefore not be combined, at least not theoretically. In addition, if firms attempt to follow a combined strategy, they will create a confusing image in the minds of the consumers and will ultimately become “stuck-in-the-middle”, which Porter (1980) described as a state where firms would not be able to generate sustainable competitive advantage. Porter’s (1980) generic strategies have received some critique, however, since some scholars claim that it is, in certain circumstances, possible to pursue both strategies (Miller and Dess, 1993) and that it may even be necessary to pursue both strategies in order to achieve a competitive advantage (Hill, 1988). However, for empirical research, the generic strategies of Porter (1980) have been found to be a “parsimonious, yet robust” framework (Williams et al., 1995, p. 25).
3.4. From strategic management to business strategy

The operationalising of business strategy in research has tended to examine a number of variables that are under the control of the firm, and which are therefore in the realm of management, such as: pricing, promotion, research and development (Galbraith and Schendel, 1983, p. 155; e.g. Miller and Friesen, 1983; Miller and Dess, 1993). However, specification of these variables arguably “neglects a fundamental theoretical point”, which is that “strategies represent a network of interactions” that ultimately create a business strategy (Galbraith and Schendel, 1983, p. 155). A number of authors have considered the factors that shape a firm’s strategic behaviour and its competitive advantage. Two schools of thought have in particular stood the challenge of time and prevailed in most of the strategy and strategic management writing. One school of thought stems from the industrial economics perspective and argues that it is a firm’s industry environment that shapes its actions and potential profits (Delorme et al., 2003; Dess and Beard, 1984; Porter, 1980). The other school of thought argues that it is a firm’s resources, capabilities and competences that are key to its success in the market environment (Barney, 1991; Penrose, 1959; Wernerfelt, 1984). However, the historical evolution of these concepts is not straightforward. Rather, certain periods in the last century have been dominated by either the resources/capability/competence or the industry/market environment perspective (Hoskisson et al., 1999).

Broadly speaking, the resource/capability/competence and the industry/market environment perspectives have been labelled as, respectively, the resource-based view (RBV) and the structural-conduct-performance (SCP) model. Early writing, 1920-30, was dominated by the internal perspective and an emphasis on firms’ capabilities as the fundamental factor in their success. Later research, 1940-50s, focused on the structure of the market, in particular the level of competition, as the key factor that shaped a firm’s performance. Writing in the 1960s again turned to the internal aspects of the firm as explaining firms’ success, before the external market view again gained popularity as a theory to explain firms’ behaviour. Nevertheless, the late 1980s witnessed yet another shift in the strategic focus, and once again the RBV was established as the key factor in determining business strategy and competitive advantage. Only in the last twenty years have synthesised models of the two schools of thought been widely...
published in strategy text books. This evolution of strategic thought is also explained by Hoskisson et al. (1999), in what they called the “swing of pendulums” of strategic management.

The following two sub-sections will separately examine the above two strategic schools of thought, by first examining the theory and models related to the SCP perspective, before considering the RBV perspective.

3.4.1. Industry environments and competitive advantage: SCP and Porter’s five forces

The industry and market environment approach to strategy suggests that firms should analyse the industry environment and exploit opportunities within the market. The dominant model of the industry environment approach was for a long time the structure-conduct-performance (SCP) paradigm of strategy (Delorme et al., 2003), which argues that “the essence of formulating strategy is relating a firm to its environment, and a key aspect of the firm’s environment is the industry in which it competes” (Hemmasi et al., 1990, p. 431). The SCP model has been widely used since the 1930s by industrial economists to explain the behaviour and performance of firms (Barney and Hesterly, 2006; Delorme et al., 2003). The work of Bain (1956), Mason (1957) and Porter (1979) further emphasised the importance of analysing the industry environment, in order to establish a business strategy that would allow the firm to develop a competitive advantage and prosper within an industry (see also Hoskisson et al., 1999).

The basic model is illustrated in figure 8 (from Pitkethly, in Faulkner and Campbell, 2003, p. 232), and it argues that the industry (market) environment directly, and solely, influences a firm’s conduct (strategy), which, in turn, determines its performance. Consistent with this, traditional models of manufacturing and operational strategy suggest that it is the market environment that influences the firm’s manufacturing strategy and the performance of the firm (Ward and Duray, 2000). The SCP model argues that the structure of the industry influences firms’ liberty with respect to their strategic decisions. For example, in highly competitive
markets, firms’ decisions may be constrained by their environment and their economic responsibilities to shareholders.

Figure 8 - The Structure-Conduct-Performance Model

Specifically, the early development of the SCP model emphasised the structure of the market, in particular the degree of market concentration and how this influences a firm’s strategic decisions and performance (Delorme et al., 2003). In addition to the concentration of sellers, the concentration of buyers, the level of product differentiation, and cost structure, the presence of barriers to entry and exit and the extent of vertical integration were also considered as important parts of the market structure that would influence firms’ strategy and performance (Delorme et al., 2003). Grant (2004) also highlighted a number of other factors that influence the environment at a strategic level, amongst others the national and international economy, technology, government and politics, and the natural environment, along with the demographic and social structure at a macro level.

Given the structure of the industry environment, a firm would need to develop a business strategy in terms of “pricing behavior, products strategies, advertising, research and development, plant investment and legal tactics” (Pitkethly, in Faulkner and Campbell, 2003; p. 238), all of which in turn would influence their performance and the overall performance and attractiveness of the industry. However, as argued by the SCP perspective, if the industry is financially attractive to new firms, this would then also influence firms’ strategy and the general structure of the market by attracting new entry. Thus Porter (1980; from Pitkethly, in Faulkner and Campbell, 2003, p. 239) revised the basic SCP model and added a feedback system, as illustrated in figure 9.
Porter (1980) extended the structure-conduct-performance model and perhaps developed a more popular and clearer model, which still reflected the same economic ideas as the original one (Ormanidhi and Stringa, 2008). In addition to revising the SCP model, Porter (1979) argued that industry attractiveness and subsequent firm performance were determined by five “forces” of the industry environment: the bargaining power of buyers; the bargaining power of suppliers; the threat of new entry; the threat of substitutes; and the intensity of rivalry in the industry. Porter (1979) argued that these five forces should determine firms’ competitive strategy. By analysing the market environment according to these factors, firms would be in a position to design and create a competitive strategy that was appropriate for the environment and allow it to achieve abnormal returns.

The development of Porter’s Five Forces model dominated the 1980s and was a cornerstone of strategic management and analysis until the focus of strategy shifted to the internal resources and capabilities of the firms as offered by the resource-based view (Hoskisson et al., 1999; Pitkethly in Faulkner and Campbell, 2003)

### 3.4.2. Resources and advantage: An internal approach

As noted, early research in strategic management focused on firms’ resources as an influence on their performance, and the work of Ansoff (1965), Learned et al., (1965) and Penrose (1959) related the behaviour and prosperity of the firm to its resources (see also Hoskinsson et al., 1999). These early contributions “emphasized […] internal processes and characteristics, such as the decision-making process, information-processing limitations, power and coalitions,
and hierarchical structures” (Hoskisson et al. 1999, p. 421). However, in the 1980s the industrial economics perspective of Porter (1979) dominated strategic theory, and in contention with this view (RBV), which ignored firm attributes in firms’ strategic development, the resource-based view was further developed in the late 80s and early 90s (Barney, 1991; Hoskisson et al., 1999; Russo and Fouts, 1997).

The RBV suggests that firm resources play a central role in shaping strategy and performance. Resources of the firm can be defined as “anything which could be thought of as a strength or weakness of a given firm” (Wernerfelt 1984, p. 172). It includes “all assets, capabilities, organisation processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness” (Barney 1991, p. 101). Thus, firm resources can be characterised as anything that assists the firm in improving performance and can range from tangible resources of labour, technology and capital, to intangible resources of know-how, reputation and brand equity. Furthermore, these resources may either stem from within the company or have been attained in the market place (Olavarrieta and Ellinger, 1997).

One of the drivers behind the development of the RBV was the limitation of the external environment approach to strategy as noted by Barney (1991), who criticised the SCP and Porter’s Five Forces models because they assumed that firms operating in the same industry and environment had identical resources and capabilities. Nevertheless, the counter-argument to this is that resources, which are specific to a firm, can be replicated, or bought, by competitors if they observe that a particular firm can achieve competitive advantage through them (Barney, 1991). Porter (1980) argued therefore that firms should analyse their external environment and decide on a generic strategy, and subsequently develop those resources that were needed in order to be competitive (Barney 1991, 1986).

The fundamental and conflicting assumption between the two schools of thought is therefore based upon the mobility and homogeneity of resources. The SCP perspective of business strategy assumes near-perfect mobility of resources, which in turn creates homogeneity within industries (Barney, 1991). In contrast, the RBV argues that resources can be specific to
individual firms and not transferable to others, because otherwise firms within an industry would all pursue the same strategy (Barney, 1991). To establish further the strength and credibility of the resource-based view, Barney (1991) argued that the resources available to firms should be valuable, rare and difficult to imitate, and in that way they would not become homogeneous within an industry. Peteraf (1993) makes an extension to Barney’s (1991) assumptions, by suggesting four conditions that must be met by a firm’s specific resources if the firm is to achieve a competitive advantage. Firstly, resources must be heterogeneous, such that the firm possesses a resource that is scarce and in demand, and by using that resource firms can achieve abnormal profits either through Ricardian or monopoly rent. Secondly, in the long run there must be a limit to the level of competition, otherwise the rent (advantage) gained from possessing a scarce resource diminishes. Thirdly, firms’ resources should be immobile, to the extent that it is not possible for competitors to acquire the same resources in the market. Fourthly, Peteraf (1993) suggests that there must be ex ante limits to competition, such that it is not possible to acquire, or develop, resources at a lower cost than the long-term rent.

Another unique aspect of the RBV is the nature of managerial involvement. In the SCP and Porter’s Five Forces model, managers are expected to react to the environment. However, with respect to the RBV, managers are expected to take a proactive approach to any actions, and therefore RBV requires that managers have the skills to exploit opportunities and limit threats from the external environment through the appropriate deployment of resources (Lockett et al., 2009).

According to Lynch (2006), firms’ resources should be considered along two dimensions: one where firms’ capabilities are related to the value chain and where firms turn inputs into finished products; and one where the firms’ resources and capabilities create competitive advantages. In addition, Lynch (2006) argues that firms in an industry will not all acquire the same resources, because each individual firm will attempt to differentiate its value-adding activities, and in so doing firms’ competitive advantage will be subject to their particular target group. Hence the reason that firms in unattractive markets, according to Porter’s Five
Forces, may still have a competitive advantage and be profitable, because their value-adding activities are different from those of their competitors (Barney, 1991; Lynch, 2006).

The RBV has one major implication for empirical assessment, however. If firms are to gain a sustainable competitive advantage then their resources need to be valuable, rare, inimitable and non-substitutional (Barney, 1999). However, this definition has serious implications for any empirical assessment that considers the RBV, and has been subject to considerable debate in the strategic literature, because such resources are by definition often unobservable (Barney, 1991; Godfrey and Hill, 1995). Godfrey and Hill (1995) acknowledge the problem of measuring unobservable variables in management research. They note that research has solved the unobservable issue in both agency theory and transaction cost theory, but that no unified solution to measuring the value of resources has yet been established. A further problem of the use of RBV in empirical testing is that there are several levels of resources. Some scholars use “lower-level constructs” such as human capital, while others use variables such as experience (Priem and Butler, 2001; cited in Armstrong and Shimizu, 2007). Armstrong and Shimizu (2007, p. 966) discuss three possible methods of capturing firms’ resources: 1) “incorporating a qualitative approach”, 2) “operationalising the resources by survey methods”, or 3) “operationalising the resources by objective proxies”.

In essence, the RBV argues that firms must use their resources to add competitive value to the value chain, but that these resources can only be competitive if they are inimitable, durable, appropriate, not substitutable, competitive, innovative, and if the resources are prior or acquired properties of the individual firm only (Collis and Montgomery, 2008; Kay 1993; Lynch, 2006; Peteraf, 1993). From a supply chain perspective, the RBV has also gained considerable attention, in particular in light of recent development of collaborative advantages (Huxham and Vangen, 2005; Kanter; 1994), and by developing the supply chain into a valuable inimitable resource through which the firm can achieve a competitive advantage (Rungtusanatham et al., 2003).
3.4.3. **Strategy-as-Practice (S-a-P): A constructive approach**

Although SCP and RBV have dominated the strategic management literature (Hoskisson et al., 1999), it is worth mentioning a new emerging field of strategy. The SCP and RBV are both well-established theories of strategy, which, to a large extent, attempt to predict and prescribe the appropriate strategic direction of the firm. Therefore, both these theories are *ex ante* approaches to strategy. However, the emerging field of “Strategy as Practice” (S-a-P) is an *ex post* theory of strategy in the sense that it is concerned with the actual actions of managers (Johnson et al., 2007). Hence, SCP and RBV are both theories that can be used for the formulation of strategies, but these theories give little insight into how managers implement their strategy. In contrast, S-a-P is about strategising and applying strategic decisions. The S-a-P view argues that “strategy is conceptualized as a situated, socially accomplished activity, while strategizing compromises these actions, interactions and negotiations of multiple actors and the situated practices that they draw upon in accomplishing that activity” (Jarzabkowski et al., 2007, p.7). Scholars of S-a-P argue that traditional perspectives of strategy are static and ignore the complexity and dynamism of the business environment, whereas S-a-P offers a dynamic approach to strategy that captures the complexity of strategic management (Chia and MacKay, 2007). The S-a-P view criticises the RBV on similar grounds as Porter, and argues that uncertain markets with mobile resources and an abundance of information, reduces the rarity of the resources a firm might possess (Johnson et al. 2007). In addition, they argue that the traditional strategic perspective is not appropriate for “hypercompetitive” markets, where “surprise and innovation” often influence firms’ success (Johnson et al., 2007, p. 8).

3.4.4. **Comparing paradigms – a partial synthesis**

The SCP models and the RBV are both theories that have been subject to substantial empirical analysis (Armstrong and Shimizu, 2007; Delorme et al., 2003; Lockett et al., 2009). In contrast, S–a-P is still an emerging theory which has not been fully developed, and calls for more research into S-a-P are concerned with the construction of theory on how managers “do strategy” (Whittington, 1996; Jarzabkowski, 2004). Therefore, S-a-P needs to be developed
further in order to create a robust research field (Jarzabkowski et al., 2007). Research into S-a-P would need to take a constructive epistemological stance, because “the nitty-gritty, local routines of practice are not easily understood or influenced from a distance. If the full implications of strategy as practice are taken on board, researchers will need to do more than manipulate large statistical databases and teachers do more than merely lecture” (Whittington 1996, p. 732). In conclusion, S-a-P is still in its infancy and further theoretical developments are needed in order to understand fully the elements of it.

The structure-conduct-performance and the resource-based view both seek to explain how firms can create a competitive advantage. However, the environmental perspective of Porter and the SCP model argue that firms create their competitive advantage by analysing the environment. In contrast the resource-based perspective argues that it is the use of resources and capabilities that creates competitive advantages. Nevertheless, both schools of thought have, as noted, limitations. SCP scholars argue that resources alone cannot create sustainable competitive advantages, and RBV scholars argue that it is not sufficient to analyse only the external environment in order to shape a firm’s business strategy. The RBV of Barney (1991) and Grant (1991) however does not reject the SCP model, but argues that analysing the environment is not sufficient in order to create a sustainable competitive advantage, and they reject the assumption that firms within a particular industry have homogeneous resources. Porter (1991) too, in an attempt to formulate a dynamic theory of strategy, acknowledges the importance of possessing something that is different from competitors, reflecting the RBV argument, whether this comes from resources to achieve a Ricadian (lower cost) or monopoly rent (differentiation)\(^8\). Therefore, the two schools of thought seem to be complementary rather than mutually exclusive approaches to strategic management (Teece et al., 1997), and a synthesis of the two schools of thought may be more appropriate for strategic analysis, as also shown in the strategic management process model (Figure 10) of Barney and Hesterly (2006, p. 5).

---

\(^8\) Porter (1991) however still argued that RBV cannot be a theory of strategy because he states that resources are mobile, and thus any advantages that can be gained are not sustainable.
At the beginning of the strategic planning process, figure 10, it is suggested that firms need to consider their mission and objectives before analysing their external and internal environments. The key element in the strategic management process is that the strategic analysis influences firms’ strategic decisions and shapes their competitive advantage, and therefore both the firm’s industry and resources are considered to be antecedents of business strategy. Barney and Hesterly (2006) and Grant (2004) both offer synthesis models of strategy that recognise that industry environment and firm resources both influence the firm’s business strategy. The work of Yip (1989) and Zou and Cavusgil (1996) also suggest that a firm’s strategy is influenced both by the industry environment and its resources and capabilities. It therefore appears that strategic management and strategic analysis include both external and internal environments, and that the SCP/Porter’s Five Forces and RBV should be considered as complements elements, rather than substitutions, of strategic management.

The extent to which a firm’s behaviour and performance is influenced by either the external or internal environment has yielded mixed results in the academic literature. In order to understand the importance and validity of the two paradigms, researchers have sought to assess the variation of profitability within and across industries. If the variation of profitability is greatest within industries, compared to the variation across industries, then it suggests that the RBV is comparatively better at explaining a firm’s success than the market environment and the SCP perspective. McGahan and Porter (1997, p. 15) find that “year, industry, corporate-patent, and business-specific effects account for 2 percent, 19 percent, 4 percent, and 32 percent, respectively, of the aggregate variance in profitability”. This confirms that...
industry- and business-specific (resources) factors are among the most important in shaping firm performance. Their findings also suggest that the RBV is better than the SCP at explaining performance. Earlier research by Rumelt (1991) found that industry nature only accounted marginally for the variance in a firm’s performance, and that resources were by far the most important factor in a firm’s performance. Nonetheless, research by Powell (1996) suggests that industry accounts for approximately 20 percent of the variance in firm performance. As such, the results on the relative importance of the industry environment and the firms resources in shaping strategy and performance is mixed, this may be a reflection of the difficulties of identifying both industry and resource characteristics.

Previous research has therefore confirmed that both industry characteristics and in particular resources matter with regards to a firm’s performance. It is however difficult to assess fully the effect of the RBV on firms’ conduct and performance since inimitable resources, as noted, are by definition unobservable (Barney, 1991). Nevertheless, it appears clear that according to recent research and definitions relating to business strategy and competitive advantage, both of these are shaped by both the industry environment and the internal environment of the firm, and that recent scholars combine, or at least acknowledge, the two approaches (e.g. Hoskinsson et al., 1999; Barney and Hesterly, 2006; McGahan and Porter, 1997).

3.5. Conclusion

One of the most complex tasks for firms is to achieve competitive and sustainable advantages, which fulfil not only their economic responsibilities to their shareholders, but also their wider responsibilities to society. This chapter has provided an overview of the strategic management literature. This plays an important role in the development of the conceptual framework, which will be presented, in the following chapter. This chapter has also highlighted a number of features of the strategic management concept. Alongside the concept’s ambiguity and diversity, the strategic management literature has argued that business strategy is broadly shaped by the characteristics of the market environments, in particular in terms of competition and the firms’ resources and capabilities.
CHAPTER 4
4. A STRATEGIC PERSPECTIVE OF THE INFLUENCES ON RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT: CONCEPTUAL FRAMEWORK AND PROPOSITION DEVELOPMENT

4.1. Introduction

This chapter introduces a conceptualisation of responsible purchasing and supply management (RPSM) that emphasises the role and potential contribution of strategic management and in particular business strategy, in understanding how firms decide their engagement with such practices. In so doing, this chapter, similar to the work of other scholars (e.g. Burke and Logsdon, 1996; Husted and Allen, 2006; McWilliams and Siegel, 2001), applies a strategic logic to the concept of CSR, albeit with a focus on such activities in the firms’ purchasing and supply chain function.

This chapter therefore addresses the question of how RPSM may differ among companies, by using theories and concepts relating to strategic management. The conceptualisation of applying strategic thoughts to RPSM is inspired by two observations of the extant literature. First, one of the issues that has dominated recent writing in the CSR literature is the extent to which such practices are a source of competitive advantage, which for example can be used to differentiate products and improve firms’ performance, and as such there is a considerable literature that views CSR and RPSM from a strategic perspective (e.g. McWilliams and Siegel, 2001; Van de Ven and Jeurissen, 2005). This literature draws in particular on the conceptual lens of strategic management and classical economic theory. Second, organisations appear to increasingly be using CSR and RPSM as a way of differentiating their products and services. The Body Shop, Unilever, Marks and Spencer, Waitrose, Sainsbury’s, Co-op, British Telecom and British American Tobacco are all UK-based companies that have been recognised for their responsible supply chain initiatives, and the common thread among these companies is that such practices are becoming a part of the business strategy to gain a competitive advantage (Business in the Community, 2010).
Based on these observations, this chapter will outline a conceptual framework and develop a set of testable propositions, which will combine central elements from the strategic management and CSR literature with the context of RPSM. In short, the conceptual framework proposes that firms’ decisions to engage in RPSM are ultimately guided by the industry environment in which they are operating. The industry environment influences both a firm’s financial resources and its business strategy. In turn, these elements have a significant direct effect on the extent to which RPSM is driven by a strategic or discretionary motive. The framework and propositions offered in this chapter will subsequently be subject to empirical testing in the next chapters.

4.2. Conceptual framework

Existing contributions to the relationship between CSR and strategy have, broadly speaking, been developed from the classical strategy and industrial economics literature (Campbell, 2007; Husted and Allen, 2001; McWilliams and Sigel, 2001; Van de Ven and Jeurissen, 2005). As such, it has been suggested that a firm’s engagement with CSR is influenced by: 1) industry structure, 2) firm resources, and 3) business strategy. There is, however, no consensus on the relationship between these three elements, or indeed their relative importance in shaping CSR. For example, some researchers have suggested that industry environment and resources directly and independently shape CSR strategies (Husted and Allen, 2001). In contrast, others have acknowledged that it is the industry environment which influences a firm’s financial resources and its business strategy, thus suggesting that the industry environment has an indirect role in influencing CSR practices, but only because it influences financial resources and business strategy, which, in turn, directly shapes a firm’s CSR performance (Campbell, 2007; McWilliams and Siegel, 2006; Vilanova et al., 2009). Taking this latter view of how strategic management influences CSR, which is the most common perspective in the literature, this research views RPSM as being indirectly contingent upon a firm’s industry environment, which influences both financial resources and business strategy. Both business strategy and financial resources subsequently directly influence RPSM. Adding to this argument, however, it is also necessary to acknowledge that business strategy in
particular may also influence a firm’s general purchasing and supply chain processes, which can directly influence RPSM. As such RPSM may be an integrated part of the firm’s overall purchasing and supply chain processes, which in itself may be considered a strategic element of the firm.

The proposed framework is given in figure 11. Bearing in mind that this research adopts a positivist epistemology, the conceptual model outlines the relationship that would typically be observed in the market. As such, the proposed relationships are what would be expected from the typical firm given its industry environment. The conceptual framework views RPSM as being dependent on the firm’s industry environment, and thus the first part of the model shows how different types of industry environment influence financial resources and business strategy. In turn, both business strategy and financial resources will be argued to have a direct effect on the strategic and discretionary roles of RPSM, respectively.

Consistent with recent writing in the purchasing and supply chain field, the conceptual framework also includes a variable that seeks to understand a firm’s purchasing and supply chain processes and “philosophy”. This variable takes into account the potential integrated nature between purchasing and supply processes, and strategies, and engagement with RPSM. As such, different approaches to RPSM engagement may not be explained by either financial resources or business strategy, but rather such practices will be a function of the firm’s inherited values and stances to its supply chain activities.

Although the emphasis of the conceptual framework is on the strategic role of RPSM, it is worth noting that the framework also considers the discretionary role of RPSM. As illustrated, financial resources have a direct role in shaping both business strategy and RPSM. An indirect relationship between financial resources and RPSM, as moderated by business strategy, suggests that RPSM is a strategic issue. In contrast, a direct relationship between financial resources and RPSM suggests that RPSM is not an integrated part of the firm’s business strategy. A direct relationship would thus indicate that it is a discretionary activity, and that financial resources allow managers to invest in “pet-projects” (Bourgeois, 1981; Campbell, 2007).
In terms of a firm’s RPSM responsiveness, the framework presented in figure 11 can be considered in the context of van Tulder et al.’s (2009) CSR and RPSM typologies, which have been modified to this analysis and given in figure 12.
As illustrated in figure 12, under fierce market conditions firms’ RPSM strategies are limited to inactive and reactive processes. As such, compliance and the likelihood of implementation are relatively low. The reason for this is partly due to the fact that fierce markets, in general, are associated with cost leadership strategies and limited financial resources. Hence, firms are more concerned with their economic responsibilities and there are few, if any, strategic incentives to engage in RPSM. In contrast, firms that pursue active and proactive strategies of RPSM, deliberately choose these strategies and are committed to implementing RPSM. This is predominantly due to the way the market environment shapes the firms’ business strategy and allows investment in differentiation through both branding and innovation. In this respect, RPSM becomes a central part of the firms’ business strategy, as responsible practices are related to the building and maintenance of a brand. These firms seek not only to do what is required to survive, but also to establish long-run benefits of responsible business activities.
Similar to Van de Ven and Jeurissen (2005), the framework that will be developed further within this text suggests that in markets that are characterised as relatively weak\(^9\), firms may engage in both proactive and inactive strategies of RPSM. This also reflects the discussion of Campbell (2007), who proposed a curvilinear relationship between competition and propensity to engage in CSR.

Having outlined the fundamental idea of the conceptual framework, the next section will outline its main assumptions. Following the assumptions, the conceptual framework will be explored in more detail and a set of testable propositions will be offered.

4.2.1. **Assumptions**

In the development of the conceptual framework, and its associated propositions offered in the next section, a number of assumptions have been made. First, business strategies are formed through “sensemaking processes, which involve a degree of freedom”, and therefore firms choose whether or not to integrate CSR and RPSM with the business strategy (Van de Ven and Jeurissen, 2005, p. 302). Indeed, it has been argued that the relationship between CSR and financial performance is not one of chance, but one that occurs and strengthens when the firm’s business strategy is closely integrated with its CSR strategy (Husted and Allen, 2001). Second, the framework relies on the reliability and validity of the classical approach to strategic management. As such, the assumption is that the industry environment shapes a firm’s behaviour, both directly and indirectly. Third, consistent with the strategic CSR literature, the framework assumes a strong business case for RPSM which emphasises the need for alignment between business strategy and RPSM. It is therefore assumed that the engagement with RPSM can create access to other markets, differentiate the brand, reduce risk and improve reputation (Henderson, 2001; Garriga and Melé, 2004). Finally, the framework assumes a strong correlation between CSR and RPSM. As the strategic literature on RPSM is limited, the conceptualisation of the framework presented herein draws heavily on the

\(^9\) Weak markets are characterised as markets where more than two of the Porter’s Five Forces can be considered relatively low.
strategic CSR literature. In order to make these contributions of the strategic CSR literature valid to the RPSM case, it is also assumed that a firm’s overall engagement with CSR is closely tied to its overall engagement with RPSM.

4.3. **Proposition development**

The following section develops a set of propositions that relate to the conceptual framework. The text will focus on two primary arguments: 1) the industry environment is instrumental in shaping RPSM practices, due to its effect on business strategy and because business strategy influences the level of engagement with RPSM; 2) the industry environment is instrumental in shaping RPSM practices, due to its effect on financial resources, and financial resources may influence both business strategy but also directly, and in a discretionary way, spending on RPSM.

**Industry Environment, Business Strategy and RPSM**

The text will start by considering the first of the two arguments outlined above, and therefore the path relationship between industry environment, business strategy and ultimately RPSM.

Van de Ven and Jeurissen (2005) distinguish between two types of industry environments: fierce and strong. They argue that a fierce market environment tends to be associated with a dominant strategy of low cost. These markets are associated with tight budgets, due to low entry barriers, homogeneous products, readily available substitutes and high bargaining power of buyer and suppliers. Under such market conditions RPSM is neglected because firms cannot afford it, and because CSR and RPSM are not an integrated part of the business strategy. As a result, RPSM is neglected and firms may only apply with moral and legal obligations. In contrast, strong market environments are associated with a dominant business strategy of differentiation and innovation. Van de Ven and Jeurissen (2005) define these markets as markets in which one or two of Porter’s (1979) Five Forces are weak. In these markets, there are financial resources that allow the firm to invest and engage in CSR and RPSM. Furthermore, as these markets foster an environment where differentiation is the
predominant strategy, CSR and RPSM become a central part of the firm’s business strategy, which can be used to differentiate the product and to create an “ethical” brand (Van de Ven and Jeurissen, 2005).

Husted and Allen (2001) notice that historically the industry environment have had an important role in influencing CSR practices, through its integration with a firm’s business strategy. Much like the work of Van de Ven and Jeurissen (2005), Husted and Allen (2001) use elements of the Porter’s Five Forces framework to describe how the industry environment influences firms’ socially and environmentally responsible business practices. They implicitly link differentiation strategies with proactive CSR practices, and acknowledge that these strategies are only effective if consumers make purchasing decisions based on the firm’s and product’s environmental and social performance. Therefore a strategic view of proactive RPSM practices depends on the extent to which consumers are sensitive to firms’ RPSM behaviour and if they are willing and able to pay a premium for the products that have strong RPSM credentials. In contrast, firms that pursue low-cost strategies tend only to engage in CSR if such practices lead to process innovation with greater benefits than the investment in CSR. Such processes may involve increased organisational learning and the ability to “attract and maintain an effective labor force” (Husted and Allen, 2001, p. 11). Based on these two views, Husted and Allen (2001) suggest that the success of a differentiation social strategy is greater in markets where there is relatively greater bargaining power of customers. In markets where there is relatively greater bargaining power on the part of the supplier the impact of a cost leadership (low cost) social strategy is however more likely to create a competitive advantage.

The extent to which the industry environment, in particular in terms of competition, fosters or hinders CSR and RPSM, has received mixed presentation and interpretation in the existing literature. For example, Cottrill (1990), in one of the earlier developments of the relationship between industry and CSR, suggests that both inter- and intra-industry competition influence CSR. In terms of inter-industry competition, Cottrill (1990, p.725) observes that companies that are “frequently cited as responsible are often those relieved of the burdens of competition”. This suggests that CSR activities are a result of departure from the optimal level
of competition within industries (Cottrill, 1990, p.725). As such, pressure for CSR is merely stakeholders seeking to “recapture the economic profits [...] lost to imperfectly competitive markets” (Cottrill, 1990, p. 725). Furthermore, Cottrill observes that CSR is generally negatively associated with intra-firm competition. In other words, increased competition between players in the same market drives out CSR behaviour.

Bagnoli and Watts (2003) consider firms to compete for socially and environmentally responsible consumers, by selling private goods that are either explicitly or implicitly linked to the provision of a public good (environmentally or socially responsible activities). They argue that firms can link the public good to their private good and thereby integrate CSR into their business strategy. These issues are examined through the Cournot and Bertrand models, and their observations suggest that less competitive environments result in greater provision of the public good compared to more competitive environments. The problem with firms competing for socially responsible consumers is that they can also overproduce the public good. In their framework, Bagnoli and Watts (2003) consider the public good to be a by-product of product market competition. Their findings suggest that when the market is very competitive, and when there are low barriers to entry, firms cannot capture enough consumer benefits from having invested in CSR initiatives, as such activities increase the marginal cost of producing the private good.

Although Siyaranamual (2009) acknowledges the economic soundness behind Cottrill’s argument, he suggests that CSR activities should be positively correlated with competition: that is if the decision to engage in CSR is strategically driven and if such activities seek to respond to a demand for CSR goods. This theoretical argument is echoed by Fernandez-Kranz and Santato (2007) who also suggest that strategic CSR is positively correlated with competition, and altruistic CSR is negatively correlated with competition. Furthermore, their empirical findings support this relationship. McWilliams and Siegel (2001) also notice how the industry structure shapes firms’ CSR practices. Using the theory of the industry life cycle, they argue that firms, at the initial stages of the life cycle, focus on optimising the production process. At the later stages of the industry life cycle, in particular at the maturity stage, industry environments become more sophisticated and CSR is then deployed as a
differentiation mechanism, where the degree of competitive intensity is positively related to CSR engagement.

Campbell (2007) offers a synthesis on the two perspectives, and suggests that the relationship between competition and CSR is curvilinear. Campbell (2007) argues that in perfect competitive industries there will be no incentive to engage in CSR. However, assuming a modest profit that allows investment into CSR, Campbell (2007) argues that competition drives such practices, as CSR will be used as a tool to differentiate the product and the firm.

Assuming that RPSM is an integrated manifesto of CSR, the above discussion implies an evident relationship between the structure of the industry environment and RPSM practices, as mediated by a firm’s propensity to differentiate its products. This, in turn, suggests that industry environment only influences RPSM insofar as it influences business strategy and the importance of differentiation. It is thus proposed that:

*Proposition 1a: The industry environment plays a significant indirect role in shaping responsible purchasing and supply management practices, as the industry environment influences a firm’s business strategy.*

In order to make a complete argument about the indirect role of industry environment on RPSM, the following text considers the direct role between business strategy and RPSM.

As CSR and responsible business behaviour have become a mainstream and salient issue for many firms, researchers have suggested that only firms with appropriate alignment between CSR practices and business strategy will be able to reap the benefits of such initiatives (e.g. Burke and Logsdon, 1996; McElhaney, 2009; Sirsly and Lamertz, 2008). The strategic importance of CSR is reflected by the definition of Werther and Chandler (2005, p. 324), who argue that “CSR is about incorporating common sense polices into corporate strategy, culture, and day-to-day decision making to meet stakeholders’ needs, broadly defined. It is about strategies that will make firms and their brands more successful in turbulent environments”. From a strategic perspective, CSR is therefore an activity that should assist managers
identifying and exploiting opportunities to create competitive advantages in the market (Baron, 2001). Furthermore, strategic CSR is about both creating competitive advantages, through reputation, differentiation and legitimacy (Burke and Logsdon, 1996; Dentchev, 2004), and eliminating threats in the market environment and by offering brand insurance (Werther and Chandler, 2005).

Burke and Logsdon (1996, p. 496) offered one of the first perspectives on how to integrate strategy and CSR, and argued that CSR “…is strategic when it yields substantial business-related benefits to the firm, in particular by supporting core business activities and thus contributing to the firm’s effectiveness in accomplishing its mission”. They further argued that a firm’s CSR activities must be central to its mission and its objectives, and CSR efforts should be specific to individual firms, such that they can assist the firm in creating a competitive advantage. In addition, they argue that CSR must be proactive and respond to changes in the macro-environment. Moreover, CSR programmes should be voluntary and not merely abide by government regulation, and any activities should be visible and recognisable to stakeholders of the firm. If firms consider these five elements with respect to their CSR programmes, then their propensity to reap the benefits of responsible practices will be greater.

Later work by Sirsly and Lamertz (2008, p. 358) used the ideas of Burke and Logsdon (1996), and argued that CSR can be “a source of sustainable competitive advantage in gaining economic or social benefit or both when such an initiative is strategic and supported by CSR processes and capabilities that advantage a focal firm over its competitors”. In their framework, which builds on the resource-based view, Sirsly and Lamertz (2008) argue that firms can achieve a first-mover advantage from their CSR initiatives on condition that such initiatives are central to the firm’s vision (centrality), visible to stakeholders (visibility) and generate firm-specific advantages to the firm beyond furthering some social good (specificity). If CSR initiatives are not central to the firm’s business strategy then firms may only achieve late-mover advantage. The resource-based view therefore suggests that firms can through CSR initiatives gain a resource that is rare, valuable and difficult to imitate, thus providing them with a competitive advantage (Sirsly and Lamertz, 2008).
Some scholars argue that CSR in itself is a business strategy, or at least a part of the business strategy concept. For example, McElhaney (2009) argues that a firm’s CSR efforts must be aligned with its business strategy and its core competences. Any CSR activities should therefore be of strategic relevance to the firm and actively used for branding and communication purposes. Furthermore, she argues that in the future, advantages cannot be gained from just engaging in CSR but only from the appropriate integration between business strategy and CSR. Similar lines of thought are followed by McManus (2008) who notes that as businesses are increasingly engaging in CSR activities, the integration between business strategy and such activities becomes paramount for success. Levy (1999) also argues that all CSR activities must be of strategic concern and must be aligned with the objectives and values of the firm (corporate strategy). Even critics of the CSR concept, such as Friedman (1970) and Henderson (2001), argue that if firms can obtain strategic and economic benefits through such activities, whether this is through product differentiation or about retaining and attracting employees, then such activities should be undertaken. Furthermore, theoretical work by Husted and de Jesus Salazar (2006) suggest that the benefits to society will be greater if firms engage strategically in socially and environmentally responsible initiatives, in contrast to undertaking such initiatives from an altruistic perspective. This view is also noted by Porter and Kramer (2006) who argue that through appropriate alignment and fit between competitive strategy and CSR programmes, firms and society will arguably be in a position of mutual benefits.

From a market-based perspective competitive advantages and value can be added to the product through the alignment of firms’ business unit strategy and CSR strategy, and as such may allow firms to charge a premium for their products (Avram and Kuhne, 2008). McWilliams and Siegel (2001) suggest that CSR initiatives can be a signal to differentiate the quality of the product and the firm, and that innovative firms should use CSR activities to differentiate their products and to signal their quality and merits over competitors’ offers.

The above discussion has emphasised the relationship between business strategy and CSR, and argued that the level of engagement with RPSM is contingent, not only on the indirect effect of the firms’ environment, but also on the direct effect of the firms’ business strategy.
Nonetheless, some of the above contributions to the existing literature are fairly unclear in terms of the path between business strategy and RPSM, and the extent to which RPSM is an input into business strategy or if business strategy leads to, or is a part of, RPSM. Given the assumption that strategy is to a large extent a sense-making process, it is plausible to suggest that there is a direct path between business strategy and RPSM practices. In other words, when firms determine their level of RPSM engagement, they consider if these practices would assist the business strategy in achieving a competitive advantage. As such, RPSM becomes an input and a complementary process to the business strategy, but ultimately these practices are dependent on the firms’ business strategy. Therefore, the view taken here is that different business strategies lead to different RPSM, because the role and the use of RPSM to complement the business strategy depend on the extent to which firms pursue differentiation or low-cost (cost leadership) strategies. Hence it is proposed that:

Proposition 1b: The firm’s business strategy plays a significant direct role in shaping responsible purchasing and supply management practices, due to issues of differentiation, reputation, risk management and stakeholder management.

However, business strategy does not only influence firms’ CSR and RPSM practices. Different types of business strategies emphasise different business processes. As noted in chapter 3, broadly speaking, low-cost (cost leadership) strategies focus on cutting costs at all levels of the production and supply chain. In contrast, differentiation strategies focus on innovation, quality and reputation. Therefore, business and supply chain processes are contingent on business strategy, and the nature of these will also be dependent on the extent to which the firms are pursuing a differentiation or low-cost strategy. Indeed, recent contributions to the purchasing and supply chain field, in particular such work as Baier et al., (2008), Cousins (2005) and González-Benito (2007), have noted how business strategy influences, and is linked in with, different purchasing and supply chain processes. The strategic role of the purchasing and supply chain function has also been emphasized extensively in the existing literature. For example, Lummus and Vokurka (1999) note that the purchasing and supply
chain function has the potential to create competitive advantages for the firm, but only through the alignment between the supply chain activities and the strategic objectives of the firm. Faes et al. (2000, p. 539) go as far as saying that “complementarities in resources and activities”, such as the purchasing function, are considered as the “holy grail” in business strategy. Similarly, Tan et al. (2002, p. 614) argue that an integrated approach to purchasing and “supply chain management has become a significant strategic tool [for businesses that strive] to improve quality, customer service and competitive success”. Furthermore, as the importance of supply chain management grows and as the boundaries of the supply chain function have become increasingly blurred, ensuring that the supply chain function is an integrated part of the business strategy becomes vital for firms success (Chen et al. 2004; Chen and Paulraj, 2004).

In the literature the direct relationship between business strategy and supply chain management practices has remained under-developed until recently. Brown and Cousins (2004) observed how the integration between operation strategy (business strategy at the plant level) and supply strategy in the automobile and computer industries influenced supply processes. Among other things they found that in “dissonant” plants, i.e. in plants where there was limited integration of operation and supply strategy, it was difficult to implement Just-in-Time processes, due both to a lack of training and the “inability to perform to high process-quality levels [...] and [...] form strategic partnerships with suppliers” (Brown and Cousins, 2004, p. 314). In contrast, “resonant” plants, which had integrated operation and supply strategies, worked closely with suppliers, engaged actively in joint developments, and looked beyond the selection criteria of price, which were the primary criteria for “dissonant” plants. As a consequence, dissonant plants had often volatile buyer-supplier relationships that could easily be terminated. Cousins (2005) further developed the role of business strategy in shaping supply chain processes, and observed that firms that pursue differentiation strategies have much more advanced supply chain processes in place and tend to take a long-term perspective of the buyer-supplier relationship and invest in the development of supplier capabilities. Firms’ stances towards the purchasing and supply chain function are therefore directly influenced by the business strategy, but an integrated part of this function may be the engagement with RPSM issues. As such, business strategy may not directly shape RPSM, but
rather indirectly shape these practices: through the influence that business strategy has on the general purchasing and supply chain “philosophy” of the firm.

Without creating a lengthy discussion, at this stage, on the different types of purchasing and supply chain “philosophies”, it is fair to say that low cost producers tend to stress efficiency with suppliers. As such, these suppliers are evaluated on price and the quantity they can produce. In contrast, firms pursuing an overall strategy of differentiation tend to focus on the effectiveness of the suppliers, and engage actively with suppliers to ensure high quality standards (Hunt and Duhan, 2002; Miller, 1988; Ward et al., 1996). As a part of the overall purchasing and supply chain attitude a firm take, which is also likely to be a strategic issue, may therefore be the engagement in RPSM, hence proposition 1c is offered:

*Proposition 1c:* The firm’s business strategy plays a significant indirect role in shaping responsible purchasing and supply management practices, as business strategy influences a firm’s purchasing and supply chain “philosophy”, of which RPSM is an integrated aspect.

Proposition 1c should be viewed, not as the null hypothesis to proposition 1b, but as an alternative and complement to it, as it predicts a different role of business strategy in influencing RPSM. Proposition 1c suggests that RPSM is an integrated part of the firm’s purchasing and supply chain processes, which is in accordance with recent writing (Carter and Rogers, 2008; Ciliberti et al., 2008; Harwood and Humby, 2008).

It thus follows that a firm’s RPSM is a direct consequence of its purchasing and supply chain “philosophy". The work of Svensson (2007) stresses the role of the supply chain as a

---

10 The concept of purchasing and supply ‘philosophy’ is taken from the work of Krause (1997), who suggested that the firm’s attitudes and beliefs with respect to the purchasing and supply function depend on the extent to which they invest in suppliers. Firms that neglect their supply chains and who view this function to be an optional add-on and something that is not central to the overall success of the firm, will not invest in their supplier. In contrast, firms that acknowledge that the purchasing and supply chain function can be a real source of competitive advantage, and who view this function as a centralised and vital element to the firm, invest and develop suppliers.
business and management philosophy. The consequence of this process is that a firm’s RPSM practices are completely influenced by its purchasing and supply chain “philosophy” (Boyd et al., 2007). Nonetheless, the current contribution to the relationship between supply chain “philosophy” and subsequent RPSM is scarce, but research has shown that buyers’ investment into the supplier, in terms of coordination (Carter and Carter, 1998; Carter and Jennings, 2002) and supplier advances (Zhu and Sarkis, 2006), plays a significant role in implementing RPSM. Similarly, Locke et al., (2007), Egels-Zanden, (2007) and Yu (2008) argue that buyers must develop close ties with suppliers in order to integrate effectively RPSM processes into the supply chain. The point here is that such investments are closely related to the firm’s purchasing and supply chain “philosophy” as defined by Krause and Ellram (1997) and Krause et al., (1998). Therefore, in extension and in support of proposition 1c, it is proposed that:

**Proposition 2:** The firm’s purchasing and supply chain “philosophy”, such as buyers’ investment and commitment to suppliers, directly influences responsible purchasing and supply management practices.

Having discussed how the industry environment indirectly may influence RPSM practices, as mediated by the firm’s business strategy, the following section will propose three alternative propositions to the ones given above. Rather than the emphasis being on the business strategy role in RPSM, the next section will examine how the industry environment may influence financial resources, which allow firms to invest, discretionarily, in RPSM.

**Industry Environment, Financial Resources and RPSM**

Financial resources have been shown to be one of the primary barriers to RPSM (Bowen et al., 2001; Min and Galle, 1997; Walker et al., 2008). For the purpose of the text that follows, financial resources are largely viewed in terms of organisational slack (Bourgeois, 1981). A clear distinction is therefore made between financial resources and financial performance, and in line with empirical research financial resources are seen as being a prior issue to financial
performance. In other words, financial resources influence financial performance rather than *vice versa* (Daniel et al., 2004).

From a classical strategic management perspective, it is the industry environment that influences a firm’s financial resources and slack (Dess and Beard, 1984). A number of authors have explored how the industry environment has a bearing on CSR practices, through the influence on financial resources. Most of these contributions, with the exception of Husted and Allen (2007), suggest that when the industry environments are such that limited resources are available, firms will lack the financial resources to invest in CSR and RPSM. For example, Sethi and Sama (1998) draw on the theory of the firm to explain firms’ engagement with CSR. They argue that competition generates the most efficient outcomes for consumers, and that firms will only engage in CSR if there is a market for it. Nonetheless, firms in near perfectly competitive markets will focus on short-run profitability and may engage in irresponsible business practices in order to gain short-term benefits (see Campbell, 2007). Similarly, Campbell (2007) explicitly argues that only when the market environment is such that it does not threaten the survival of the firm, will it invest in CSR. An implicit assumption of the work of Van de Ven and Jeurissen (2005) is also that the industry environment shapes business strategy because of the role it has in influencing financial resources. Therefore an alternative proposition to 1a is offered in the following proposition:

Proposition 3a: The industry environment plays a significant indirect role in shaping responsible purchasing and supply management practices, as the industry environment influences a firm’s financial resources.

Given the above discussion and in the light of proposition 3a, financial resources are unquestionably an important factor in influencing firms’ CSR and RPSM engagement, as a firm’s primary objective and responsibility is to meet its economic obligations, before engaging in legally responsible, ethical or discretionary activities (Carroll, 1979; Seifert et al., 2003). In particular, if RPSM is seen as a discretionary activity, then financial resources and slack will have a significant effect on these activities (Bourgeois, 1981; Cyert and March, 1963). For example, a number of studies have shown how financial resources represent a
barrier to RPSM (e.g. Murphy and Poist, 1995; Walker et al., 2008) and suggest that RPSM is often, or at least partly, a discretionary activity. Existing studies support this argument and have recognised the discretionary role of social and environmental practices, both in terms of CSR (Seifert et al., 2004, Waddock and Graves, 1997) and RPSM (Bowen, 2002).

Researchers have often applied the resource-based view to the firm and its CSR practices (e.g. Branco and Rodrigues, 2006; Russo and Fouts, 1997). However, these studies have viewed CSR as the end product, which can provide the firm with both internal and external benefits. Notwithstanding the competitive advantages of CSR and RPSM activities, researchers have so far neglected the explicit role of resources in developing socially and environmentally responsible activities. This is despite the fact that lack of resources, including time and training, has continuously been shown to prevent the successful implementation of RPSM (Carter, 2000; Drumwright, 1994; Murphy et al., 1996). McWilliams and Siegel (2001) acknowledge that firms must devote resources to satisfy demand for CSR. CSR and RPSM activities involve significant costs, as they may require the training and developing of suppliers, auditing and control, and new programmes which need to be implemented across the organisation and the supply chain (Branco and Rodrigues, 2006). If CSR and RPSM are to be used to differentiate the product and the firm, then there is also a cost involved in presenting an image of social and environmental responsibility (Branco and Rodrigues, 2006). Furthermore, the investment may not have an immediate, or indeed tangible, pay-off, and it has even been suggested that where the “costs involved are usually short-term in nature or continuous outflows, the benefits are often long-term” (Branco and Rodrigues, 2006; p. 112, see also Bansal, 2005). Nonetheless, when firms have a comparative advantage in their availability of scarce resources, including financial slack, then the implementation of CSR and RPSM is relatively less expensive (McWilliams and Siegel, 2001). Given the strong relationship in the literature between financial resources and socially and environmentally responsible practices, it is proposed that:

Proposition 3b: The firm’s financial resources play a significant direct role in shaping responsible purchasing and supply management practices, as they allow firms to engage in discretionary activities.
In addition to being fundamental in shaping discretionary activities, financial resources have also been linked with specific types of business strategies. Certainly, RBV theory argues that firm-specific resources such as financial slack, know-how, reputation and experience are key to the development of a business strategy. Van de Ven and Jeurissen (2005) explicitly make the link between industry environment, financial resources and business strategy. In their conceptual paper they argue that fierce market environments, i.e. the industries that are closest to perfect competition, have limited financial resources and are to a large extent forced to pursue low-cost strategies. In contrast, under strong competition, abnormal profits allow firms both to invest in R&D and build a brand through advertising. Nohria and Gulati (1996) also note how financial resources and slack facilitate innovation, and similarly Fombrun and Shanley (1990) show that financial resources are linked to reputation-building. Both innovation and reputation are often traits of firms that pursue differentiation strategies and are often used in empirical research as proxies for differentiation strategies (Brammer et al., 2009).

Although mixed, there is some evidence to suggest that firms that pursue differentiation strategies, particularly through innovation, have marginally better financial performance compared to firms that pursue either a focus or cost leadership strategy (Campbell-Hunt, 2000; Miller and Friesen, 1986; Miller, 1988; Pertusa-Ortega et al., 2009). If these findings can be applied to the typical business, RBV theory predicts that these firms will have relatively greater financial strength, as capital markets will respond to the relatively abnormal returns that have been found to be associated with firms pursuing differentiation strategies (Barney, 1986)\(^\text{11}\).

Hence, given proposition 1b, and indeed 1c, it may be that the only reason why business strategy influences RPSM is due to the indirect effects financial resources have on a firm’s

\(^{11}\) The focus here is on the pure Porter’s Generic Strategies. However, recent studies have indicated that hybrid strategies, i.e. strategies that combine elements of low cost and differentiation, are also achieving abnormal returns relative to firms that pursue one of the pure generic strategies (e.g. Pertusa-Ortega et al., 2009; Yamin et al., 1999).
propensity to pursue a differentiation strategy, whether this through innovation, branding, or reputation building.

**Proposition 3c:** *The firm’s financial resources play a significant indirect role in shaping responsible purchasing and supply management practices, as financial resources influence a firm’s business strategy.*

**Business versus consumer orientated firms**

The preceding text has viewed RPSM activities as being dependent on the industry environment, through its influence on business strategy and financial resources. The question however remains whether business strategy and financial resources are substitutes or complements in shaping RPSM? Although this question will be answered through the empirical chapters, it seems clear that RPSM may be contingent on a firm’s primary customers and whether the firm seeks to target a business to business (B2B) or business to consumer (B2C) market. There are significant differences in the branding and marketing strategies of B2C and B2B firms, and as such it may be expected that the target market influences the way in which industry environment, business strategy and financial resources influence engagement with RPSM.

Generally speaking, the B2B market has been characterised as an environment where the producer of the industrial goods and its customer are seeking a close and long-term relationship that is built upon cooperation between the two parties (Pfoertsch et al., 2007). However, in the B2C market, firms focus more on the short-term marketing mix (Ohnemus, 2009) and the relationship is not about collaboration between the firm and the consumers, but often about the firm attempting to entice consumer purchase and trial (Kotler et al., 2006). Ohnemus (2009, p. 160) also notes that brand expectations in the B2B market differ considerably from the B2C market, as a B2B “purchaser’s entire fate” could depend on the products/services it buys from the B2B producer. Therefore, in the B2B sector, research has indicated that buyers are more likely to buy from a reputable supplier when the product failure would create serious problems for the buying firm, or if the product is valuable and complex
and the buyer requires greater support (Hutton, 1997, see also Mudambi, 2002, p. 527). Furthermore, in the B2C sector marketers invest, to a greater extent, in branding “because brand image and reputation enhance differentiation and can positively influence buying behaviour, as consumers choose among competing offers” (Mudambi, 2002, p. 526). Given this, the power of branding is more widely accepted in the B2C sector, whereas the nature and importance of branding is less clear and under-researched in the B2B sector (Mudambi, 2002).

Little is known about the role of either CSR or RPSM in the B2B context, and arguably this is because the perceived stakeholder pressure has been considerably smaller than that of the B2C market (Kubenka and Myskova, 2009; Lai et al., 2010; Vaaland et al., 2008). It is however widely established that there is considerable pressure for B2C firms to behave responsibly. For example, research has shown that consumers are becoming more ethical and includes criteria of social and environmental issues into their purchasing decision. In a poll of 14500 consumers across 15 countries, more than half of respondents were identified as being “ethical active consumers” (BBC, 2009). A study by IDG (2009) also found that nearly a quarter of consumers purchased products that supported fair trade, compared with only nine percent in 2006. Another study showed that one of the top criteria for consumers when evaluating a firm’s responsible credentials is the degree to which they treat producers/suppliers fairly by ensuring good working conditions and paying a fair price. In fact, between 71-79 percent of all consumers indicated that they expected all firms to treat suppliers fairly (GFK, 2008). Co-op’s (2008) ethical consumerism report also highlights the potential of pursuing environmentally and socially responsible strategies, as ethical consumer spending has increased threefold since 1999. In particular such initiatives as Fairtrade have seen a drastic rise in demand, with consumer spending having increased up to 30-fold. Similarly, in an Ipsos Mori annual survey of consumer attitudes to business behaviour, 93 percent of all respondents believed that companies should be responsible for improving the social impact of their products and services. Supply chain specific issues were a major concern for consumers, with 92 percent expecting companies to act responsibly along their supply chains. 83 percent of all respondents said that a firm’s corporate responsibility was considered during purchasing, with 38 percent indicating that this was a major criterion for purchase (Ramrayka, 2006).
Although ethical consumerism has increased considerably in recent years, as a proportion of total spending, it remains relatively small, but that should not obscure the importance of ethical brandings, as these brands are “growing at twice the rate of their non-ethical counterparts” (Davis and Moy, 2007). It is however clear that the B2C sector has been subject to considerable stakeholder scrutiny and media attention in respect of (ir)responsible behaviour in the supply chain (Phillips and Caldwell, 2005). Furthermore, consumer pressure has been found to be one of the major drivers of RPSM (Green et al., 1996; Min and Galle, 2001; Lee, 2008; Welford and Frost, 2006). There is also evidence to suggest that RPSM in the context of the manufacturing industry is largely under-developed (Preuss, 2001) and that there is significantly less pressure for RPSM with respect to firms that predominantly operate in a B2B market (Zhu and Sarkis, 2004).

Because of differences in branding and differentiation strategies between B2C and B2B, it is proposed that:

*Proposition 4:* The relationship between the industry environment, financial resources, business strategy and subsequent responsible purchasing and supply management activities, is moderated by a firm’s target market (i.e. whether the firm operates in a B2C or B2B sector).

In summary of the development of a set of testable propositions, the proposed framework has acknowledged that RPSM is either strategically or discretionarily driven, through the role of either business strategy or financial resources, both of which are influenced and shaped by the industry environment.

4.4. Conclusion

This chapter has offered a conceptual framework which draws on the classical strategic management literature and argues that the industry environment has two effects on firms: on one side the industry environment shapes the firm’s resources, in particular its financial
resources, which in turn influences the firm’s RPSM practices, predominantly due to discretionary motives. On the other hand, a firm’s industry environment shapes business strategies, which in turn influences its strategic decision as to whether to engage in RPSM, and the use of such practices to differentiate the product and the firm.

This view is arguably more in line with the SCP model than the RBV, as it follows the arguments of Porter (1991), who describes a synthetic and dynamic view of strategic management, in which industry environments shape a firm’s business strategy, but also its financial resources, which can be used to create intangible and tangible resources that can further a firm’s competitive position.

This chapter has also argued that the extent to which RPSM is a strategic issue is much greater in the B2C sector, compared to the B2B sector, where RPSM is to a greater extent a discretionary activity, which is dependent on a firm’s ability to afford it.

Finally, it has been argued that the strategic use of RPSM leads to much more proactive RPSM strategies, compared to the reactive approaches which are often associated with fierce markets, limited resources and low-cost strategies.
CHAPTER 5
5. RESEARCH PROCESS AND METHODOLOGY

This chapter will discuss three elements of this thesis’s research process. The first part of the chapter will outline the epistemological and ontological view that has been adopted for the purpose of this research. This section will contrast the chosen perspective with other epistemological stances and evaluate its merits for this particular research.

The second part of this chapter will discuss the methodology employed to obtain data related to firms’ RPSM practices. Furthermore, this section will discuss the use of secondary data to complement primary data and to avoid common source bias. This section will focus on the construction of the RPSM measurement (the dependent variable) that was used for the purpose of this research, as this variable is consistent with all the statistical analysis conducted in the following chapters.

The final part of this chapter will discuss some of the ethical considerations that took place both before and after the data collection stage.

5.1. Epistemology

Easterby-Smith et al. (1991, p. 21) define epistemology as the “overall configuration” that influences the type of information the researcher gathers and the way that information is analysed and interpreted. The philosophical perspective taken for a particular piece of research influences the type of questions that are being asked, the method for collecting data and also the way the researcher contributes to existing literature (Crotty, 1998; Easterby-Smith et al., 1991). Nevertheless, as suggested by Crotty (1998), the researcher may also first collect the data and subsequently decide on an appropriate epistemology. The epistemological perspective taken for a particular piece of research may not necessarily be found at the beginning of a research process, but could rather be an intuitive process, which is discovered through data collection (Crotty, 1998).
The epistemological choice adopted for this research resulted from an intuitive approach and a desire to examine the relationship between certain strategic management perspectives, such as business strategy, and RPSM, through the use of statistical analysis. The epistemology for this research is therefore of the objective and positivist view.

Maylor and Blackmon (2005) divide research approaches into two main streams: the scientific and the ethnographic approach. These correspond to the division of objectivism and constructivism as made by Crotty (1998). The objectivistic and scientific approach is concerned with testing theory and hypotheses that have been generated through the literature. The aim of this approach is to generate significant and generalisable results, which will often be based on quantitative techniques that seek to measure aspects of the research questions rather than to understand the deeper meaning of them (Maylor and Blackmon, 2005). The aim of the constructivism and ethnography approach is not to test theory, but rather to generate theory and is therefore inductive rather that deductive. Through this approach the data are often themed and analysed, partly through intuition, as constructivist research aims to find a deeper meaning through the particular research. Another noticeable difference between the two approaches is the way the researcher views the world. With respect to the scientific approach the researcher is objective and independent of the world. The constructivist perspective, however, calls for the researcher to be engaged and a central part of the research (Crotty, 1998; Maylor and Blackmon, 2005).

Crotty (1998) suggested four elements of any research process: epistemology, theoretical perspective (ontology), methodology and methods. Each element represents a set of different research approaches and methods (see table 6 below), which the researcher needs to consider when addressing the overarching research question. Several aspects of the research process are often directly related through the “logic of research” (Crotty, 1998; Maylor and Blackmon, 2005). For example an objectivistic perspective is intuitively related to positivism, which, in turn, is related to survey research and statistical analysis. Crotty (1998) argues that the epistemological viewpoint of the researcher can guide the philosophy of the research process, but also that the methods and methodology can direct the epistemological standpoint. According to Crotty (1998), the researcher does not necessarily have to decide on an
epistemological and ontological approach before choosing the method and methodology, as it may well be that it is these which influence the philosophy of the research.

Table 6 - Elements of the Research Process

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>Theoretical Perspective</th>
<th>Methodology</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectivism</td>
<td>Positivism</td>
<td>Experimental research</td>
<td>Sampling</td>
</tr>
<tr>
<td>Constructivism</td>
<td>Interpretive</td>
<td>Survey research</td>
<td>Measurement and scaling</td>
</tr>
<tr>
<td>Subjectivism</td>
<td>Critical inquiry</td>
<td>Ethnography</td>
<td>Questionnaire</td>
</tr>
<tr>
<td></td>
<td>Feminism</td>
<td>Phenomenological research</td>
<td>Observation</td>
</tr>
<tr>
<td></td>
<td>Postmodernism</td>
<td>Grounded theory</td>
<td>Interview</td>
</tr>
<tr>
<td></td>
<td>Etc.</td>
<td>Action research</td>
<td>Focus group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discourse analysis</td>
<td>Case study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feminist standpoint research</td>
<td>Life story</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Etc.</td>
<td>Narrative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Visual Ethnographic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Statistic analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Data reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Theme identification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comparative analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cognitive mapping</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Interpretative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Document analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Content analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Conversation analysis</td>
</tr>
</tbody>
</table>

NB. The elements that are of significance to this thesis are highlighted in bold.

Source: Crotty, 1998, p. 5

The research questions presented earlier, and indeed the ones offered in the subsequent chapters, are deductive, in the sense that they are based upon the existing literature, and from this, potential relationships of RPSM practices have been proposed. The way the research questions and propositions have been designed is thus influenced by an objectivistic and positivistic standpoint, where the purpose is to examine the relationships between RPSM and a
number of other factors. Much of the existing empirical research also comes from the objectivistic and positivistic perspective (Carter, 2005; Razzque and Hwee, 2002; Cooper et al., 2000, 1997; Min and Galle 1997; Rao, 2002), and even qualitative studies have been approached from the positivistic standpoint (Lamming and Hampson, 1996; Carter and Jennings, 2002).

Although there are several versions of positivism (Johnson and Duberley, 2000), positivism can in general be characterised as: independence, value-freedom, causality, hypothetic-deductive, reductionism, generalisation and cross-sectional analysis (Easterby-Smith et al., 1991). This means that the researcher acts as the observer and does not influence the world. In addition, positivism suggests that the researcher can study any subject objectively, and does not need to have a personal interest in the subject. The purpose of positivism is to examine causalities between variables. This is done by creating hypotheses, deduced from the literature and theory, and these hypotheses are then subject to testing, in particular via statistical analysis (Easterby-Smith et al., 1991). The purpose of positivist research is not necessarily to create new theory, but rather to strengthen or weaken theory deduced from the literature and prior research. In addition, the purpose of positivism is to create data that can be generalised and to reduce the complexity of the data such that the issues examined are better understood (Easterby-Smith et al., 1991; Maylor and Blackmon, 2005).

The inductive and constructive perspective has not been chosen for this research as the aim is not to understand the deeper meaning of companies’ RSPM practices, but rather the purpose of this research is to identify and examine patterns that are generalisable. In addition, constructivism, or subjectivism, requires the researcher to be a part of the research and to investigate small samples in depth over time (Easterby-Smith et al., 1991). The aim of this research is not to examine a few firms’ RPSM processes, but rather to understand the RPSM processes of a large number of companies across several industries, and thereby generate data and models that predict relationships between RPSM and strategic management variables. However, for the purpose of this research, positivism does not mean that all hypotheses are deduced from existing theory and literature, since a part of this research will also adopt the philosophy of grounded theory by Glaser and Strauss (1967), Glaser (1978, 1992), and Strauss
and Corbin (1990, 1997). In particular, the systematic approach to grounded theory of Strauss and Corbin (1990) suggests that grounded theory is not inductive, but rather adductive, and thus combines theory with what is observed from the data (see also Easterby-Smith et al., 1991). As Lincoln and Guba (1985) argue grounded theory does traditionally stem from the positivistic position, where theory will emerge from the collected data (see also Belk, 2006). Nonetheless, this research considers grounded theory from its traditional positivistic roots.

The positivistic approach to research into ethics has, however, been noted to pose several potential problems regarding the data validity and reliability, as discussed by Crane (1999). Traditionally, the objective and positivistic perspective has been the main approach for studying ethics (Crane, 1999; Randall and Gibson, 1990). Nevertheless, Crane (1999) argues that survey instruments, which are the primary data collection tool for positivist researchers, do not generate reliable measures for firms’ ethical performance. This is due to the fact that it is difficult to construct a variable that measures a firm’s CSR/ethics performance, and because self-reports by managers “are subject to considerable inaccuracy and bias” (Crane, 1999, p. 243).

In summary, empirical research into RPSM issues has been influenced by both the objectivistic/positivistic and the constructive/subjective perspective. The aim of this research is to explore limitations of the existing literature, by considering the relationship between strategic management perspectives and RPSM, and by measuring the typical and general RPSM practices among UK-based firms. Therefore, the data were collected through a survey instrument and the research questions were then addressed and tested predominantly through statistical analysis with the aim of verifying/falsifying hypotheses to contribute to existing theories of RPSM.

In order to limit the social desirability issues, which are often a problem in quantitative and positivist research, the survey instruments, which will be discussed in the subsequent section, incorporated both qualitative and quantitative measurements. This will also overcome some of the problems identified by Crane (1999).
5.2. **Methodology and data collection**

A relatively new and innovative approach to collecting data was used to understand RPSM practices of UK-based firms. This method was adapted from Bloom and van Reenen (2007), who used a similar approach to understand managerial practices, in respect of examining “good” and “bad” versions across manufacturing firms.

An online questionnaire and a semi-structured telephone interview were used to collect information about the firm, its buyer-supplier relationships and its RPSM processes. A total of 178 procurement and supply managers from a range of industries were interviewed, and they responded on a total of 340 on-going buyer-supplier relationships.

The dependent variables of this thesis – socially RPSM and environmentally RPSM – were collected as part of an international research project, with partners in India, Italy and China. For the purpose of this research, however, the author only makes use of the UK data. As will become evident from the description of the research methodology, it implies the involvement of at least two active researchers to capture and measure RPSM. The UK based team consisted of four researchers, with two researchers, including the author, collecting and analysing the data, with supervision from two senior researchers. The author played a key role in developing and testing the initial questionnaire, and subsequently rectifying issues that were evident from the pilot test. In addition, the author took a leading role in terms of contacting companies, conducting interviews, analysing and scoring of the data. The collection of secondary data and the analysis conducted as part of this thesis is the sole work and responsibility of the author.

5.2.1. **Survey instrument**

Based on previous research in a number of areas, including strategy (Porter, 1980; Krause et al., 2000; Krause, 1999), strategic purchasing and supply chain management (Krause et al., 1998), organisational support (Humphreys et al., 2004); stakeholder theory (Freeman, 1984), institutional theory (Campbell, 2007), trust (Plank et al., 1999; Doney and Cannon, 1997),
credibility (Ganesan, 1994), benevolence (Ganesan, 1994), resource and power dependency (Cannon and Perreault, 1999), collaboration (Klassen and Vachon, 2003; Cannon and Homburg, 2001; Hult et al., 2007), and corporate CSR (Maignan and Ferrell, 2000), a closed-ended questionnaire was constructed that used similar questions to those previously used by other researchers. This had the merit of drawing from items which had proven reliability and validity.

The survey instrument was divided into two parts: an online part and a telephone interview. The online part sought to capture general information about the firm, including perception of their competitive strategy and competitive environment, along with questions related to their social and environmental purchasing and supply chain policies. The telephone interview was concerned with specific buyer-supplier relationships which the firm had. Each participant was asked to discuss two different ongoing buyer-supplier transactions, i.e. supplier relations, at length, and was also asked about specific characteristics of the relationship they had with the given supplier.

In addition, using a similar data collection and analysis framework to Bloom and van Reenen (2007), an innovative research tool was constructed to collect information on UK-based firms’ RPSM practices. This formed a part of the telephone interview. In order to construct a reliable survey instrument for RPSM, the methods of Bloom and van Reenen (2007) were followed. Therefore a set of open-ended questions that were related to aspects of responsible purchasing and supply chain management was constructed, which included questions on: environmental and social requirements for the supplier and supply chain; the rationale for introducing these; problem process documentation of any social and/or environmental issues; monitoring of the supplier’s social and environmental performance; and performance dialogue regarding the buyer’s and supplier’s effort to improve the environmental and social performance of the purchasing and supply chain process.

According to Bloom and van Reenen (2007, p. 1360) three issues are important to consider when using this method to collect data: 1) the scoring of responsible purchasing and supply
practices; 2) collecting accurate responses; and 3) obtaining interviews with managers. Each of these issues will now be discussed in turn.

5.2.2. *Scoring responsible purchasing and supply management*

The survey instrument consisted of a set of closed-ended questions, along with several open-ended questions. It was these open-ended questions that were used to evaluate firms’ socially and environmentally responsible purchasing and supply chain performance. The open-ended questions were grouped into five categories: requirements, rationale, problem process documentation, monitoring and performance dialogue.

The requirements section focused on firms’ social and environmental requirements of the supplier, along with any accreditation or codes of conduct the supplier was required to have or fulfil. However, in order to assess the actual\(^\text{12}\) behaviour in the supply chain, the interviewer asked for specific social and environmental examples. For example, if the respondents said they required ISO 14001 from their suppliers, the interviewer would investigate their actual environmental supply chain behaviour further by asking the respondents to identify specific environmental issues that were explored through the ISO 14001 accreditation. Similarly, if the respondent cited codes of conduct or similar, the interviewer/researcher would ask for specific issues within the codes of conduct that were requirements for the current supplier that was being discussed. The rationale section considered firms’ motives for introducing social and environmental purchasing and supply chain policies and processes, and identified whether such practices were led from within the firm or whether they were due to external factors. In addition, this section sought to capture the motive for engaging in RPSM, and to assess whether any RPSM efforts were altruistic or strategically driven. In cases where no social or environmental requirements had been introduced to the supplier, the interviewer asked for reasons why this had not been considered. The problem process documentation section was concerned with how any social or environmental issues with the particular supplier would

\(^{12}\) This research was interested in actual RPSM, in contrast to desired, in order to reduce the possibility of social desirability bias.
come to the firms’ attention, and how the firm would deal with these problems. In this section, the interviewer also asked for explicit examples of any social and environmental problems, in order for the researcher to evaluate the processes of being made aware of and dealing with social and environmental supply chain problems.

The monitoring section addressed firms’ efforts in monitoring and tracking the social and environmental performance of the supply chain and how any requirements were verified with suppliers. The monitoring processes were considered by asking the respondent how often they audited and visited the supplier, and whether these audits were announced or unannounced, and if any audits were undertaken by the firm themselves or a third-party agency. The performance dialogue section intended to examine how firms would improve the social and environmental performance of their supplier(s). This section aimed to examine firms’ engagement with the supplier, in terms of the supplier’s social and environmental improvements. For this part, the interviewer actively sought examples and verification of the firm’s methods for improving the supplier’s social and environmental performance. In addition, this section sought to address the actions of firms in cases where suppliers could not fulfil the firms’ social and environmental requirements or expectations.

[For a copy of the full questionnaire, including the quantitative and qualitative part, please refer to appendix 1]

Firms were then scored on a scale of one (worst practices) to five (best practices) (Bloom and van Reenen, 2007) with respect to both social and environmental purchasing and supply practices. By converting firms’ open-ended discussion into quantitative data, common method bias and social desirability bias were limited, since the researcher decided the appropriate value or scoring (Podsakoff et al. 2003), as opposed to the interviewee who only scored elements and characteristics of the firm and the buyer-supplier relationship in the closed-ended question part. In addition, the methodology overcame some of the limitations that tend to be associated with positivist research concerned with ethical/CSR questions as noted by Crane (1999). As noted, firms were scored by considering the best and worst practices of the interviewed companies and at the same time a judgment of what constituted “good” or “bad”
socially and environmentally responsible purchasing and supply management was made. Therefore, the firm’s performance was benchmarked against other firms’ efforts and our own evaluation of “good” RPSM practices. The first step in this approach was to define what constituted a one, two, three, four or five score. For this, 30 interviews were randomly selected, in order to gain an understanding of what types of RPSM practices firms were engaging in. This allowed the researcher(s), on a practical level, to understand aspects of firms’ requirements, rationale, problem process documentation, monitoring and performance dialogue in terms of their RPSM processes. It also allowed the researcher(s) to benchmark companies’ RPSM efforts against one another. In addition, based on the existing normative literature on RPSM, a set of standards was created for each scoring. For example a company that did not consider any social or environmental requirements for their supplier would be scored one, as opposed to companies that scored five because they had clear social or environmental supply chain policies that were implemented in the supply chain.

Thus, based on an initial benchmarking activity and the normative literature, a complete set of standards was created that would allow the researcher to score firms’ RPSM activities on a scale from 1-5. Socially and environmentally responsible purchasing and supply processes were scored independently.

[For a full outline of the scoring criteria, please refer to appendix 2]

A two-stage evaluation approach to score firms on all five aspects of RPSM was followed. Firstly, each section, for each firm, was individually scored in terms of requirements, rationale, problem process documentation, monitoring and performance dialogue. Thereafter, the entire interview was considered and any appropriate adjustments to the initial section scoring were made. This was done in order to overcome the fact that respondents sometimes elaborated on their requirements in the monitoring section, and sometimes they would discuss their performance dialogue efforts in the problem process documentation section.

To ensure that the RPSM scoring of each firm was valid, two researchers scored, independently, the participating firms on both their socially and environmentally responsible
purchasing and supply processes. Correlation and concordance coefficients were also considered with respect to the scoring each researcher had done, in order to assess the inter-rater reliability. These results are published in table 7.

**Table 7 - Correlations and Concordance Coefficients**

<table>
<thead>
<tr>
<th>Social Performance Score</th>
<th>Requirements</th>
<th>Rationale</th>
<th>Problem Process</th>
<th>Documentation</th>
<th>Monitoring</th>
<th>Performance</th>
<th>Dialogue</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.285</td>
<td>2.229</td>
<td>2.304</td>
<td>2.121</td>
<td>2.257</td>
<td>2.239</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>0.861</td>
<td>0.780</td>
<td>0.776</td>
<td>0.816</td>
<td>0.748</td>
<td>0.911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concordance</td>
<td>0.856</td>
<td>0.773</td>
<td>0.758</td>
<td>0.813</td>
<td>0.739</td>
<td>0.894</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Performance Score</th>
<th>Requirements</th>
<th>Rationale</th>
<th>Problem Process</th>
<th>Documentation</th>
<th>Monitoring</th>
<th>Performance</th>
<th>Dialogue</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.491</td>
<td>2.400</td>
<td>2.401</td>
<td>2.256</td>
<td>2.369</td>
<td>2.384</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>0.785</td>
<td>0.713</td>
<td>0.708</td>
<td>0.729</td>
<td>0.697</td>
<td>0.852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concordance</td>
<td>0.785</td>
<td>0.706</td>
<td>0.684</td>
<td>0.724</td>
<td>0.696</td>
<td>0.847</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the mean of the RPSM scores, along with the correlation and concordance of the two raters, who independently evaluated firms’ RPSM practices. As the concordance is relatively high, above 0.70 in most cases and above 0.80 in the average figures, this suggests that the raters’ scores were very similar.

As acknowledged by Bloom and Van Reenen (2007), it may be that the questionnaire only captures a subset of factors that constitute RPSM activities, but these factors are all significantly correlated and thus likely to represent a reliable proxy for firms’ actual social and environmental purchasing and supply management practices. This can be verified with the correlation analysis of the five criteria and the factor and reliability analysis given in table 8 below, which shows that the five criteria do indeed represent a single factor.
### Table 8 - Correlation Matrix and Factor Analysis

#### Social Performance Score

<table>
<thead>
<tr>
<th>Correlation matrix</th>
<th>Mean</th>
<th>St.Dev</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>2.285</td>
<td>1.2173</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rationale</td>
<td>2.229</td>
<td>1.0789</td>
<td>.861</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Process Documentation</td>
<td>2.304</td>
<td>1.0750</td>
<td>.789</td>
<td>.757</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>2.121</td>
<td>1.1078</td>
<td>.779</td>
<td>.730</td>
<td>.812</td>
<td></td>
</tr>
<tr>
<td>Performance Dialogue</td>
<td>2.257</td>
<td>1.0316</td>
<td>.747</td>
<td>.711</td>
<td>.808</td>
<td>.786</td>
</tr>
</tbody>
</table>

All correlations significant at a 0.01 level (two-tailed)

#### Environmental Performance Score

<table>
<thead>
<tr>
<th>Correlation matrix</th>
<th>Mean</th>
<th>St.Dev</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>2.491</td>
<td>1.0131</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rationale</td>
<td>2.400</td>
<td>.9283</td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Process Documentation</td>
<td>2.40</td>
<td>.910</td>
<td>.648</td>
<td>.672</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring</td>
<td>2.256</td>
<td>.9293</td>
<td>.645</td>
<td>.633</td>
<td>.685</td>
<td></td>
</tr>
<tr>
<td>Performance Dialogue</td>
<td>2.369</td>
<td>.9128</td>
<td>.622</td>
<td>.649</td>
<td>.691</td>
<td>.668</td>
</tr>
</tbody>
</table>

All correlations significant at a 0.01 level (two-tailed)

#### Factor and reliability analysis

<table>
<thead>
<tr>
<th>Items</th>
<th>Social Performance Score</th>
<th>Environmental Performance Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>.922</td>
<td>.868</td>
</tr>
<tr>
<td>Rationale</td>
<td>.895</td>
<td>.877</td>
</tr>
<tr>
<td>Problem Process Documentation</td>
<td>.919</td>
<td>.861</td>
</tr>
<tr>
<td>Monitoring</td>
<td>.906</td>
<td>.844</td>
</tr>
<tr>
<td>Performance Dialogue</td>
<td>.893</td>
<td>.844</td>
</tr>
</tbody>
</table>

| Cronback Alpha         | 0.945                     | 0.911                           |
5.2.3. Collecting accurate responses

As acknowledged by Bloom and van Reenen (2007), it can be difficult to ensure that the respondents provide the interviewer with unbiased responses. Respondents’ answers are often biased by scoring grids, and they tend to answer questions according to their expectations of what the interviewer thinks is a good and correct response (Bloom and van Reenen, 2007; Crane 1999). This bias is of particular concern when researching in the field of ethics (Crane, 1999; Fernandes and Randall, 1992; Randall and Fernandes, 1991).

The procedure to overcome the possibility of social desirability response bias is also based on the methods of Bloom and van Reenen (2007). Thus, in order to overcome problems of bias responses, the qualitative part of the survey was conducted through telephone interviews. The respondents was not told about the procedure used to evaluate their social and environmental purchasing and supply performance, and was therefore unaware that their answers would be quantified at a later stage (Bloom and van Reenen, 2007).

The series of questions the interviewer asked the respondent started with a fairly broad open-ended question, such as: “Can you describe the environmental purchasing and supply policies that you have introduced to this supplier?” as opposed to a closed-ended question, such as “have you introduced any social or environmental purchasing and supply policies to this supplier?” The questions sought to capture the firm’s actual social and environmental supply chain behaviour, and as the interview progressed the interviewer would ask for explicit examples and ask more explicit questions, such as “what specific social or environmental issues have been introduced to this supplier?” Many times the interviewer would also have to go beyond the standard interview script to get a thorough understanding of the firm’s actual RPSM practices and to be able to score them accurately.

As mentioned, the survey instrument was split into two parts. Initially the participating firm would complete an online survey, followed by a telephone interview. The online part was often completed by a senior procurement officer, who had relevant knowledge of the strategies and policies of the firm and the purchasing department. The telephone interview, which
consisted of a closed-ended and an open-ended question section, was dealing with specific buyer-supplier relationships of the firm. Therefore, this part was often completed by a purchasing or supply chain manager, or at least a person who had specific and extensive knowledge of the given buyer-supplier transaction, and who was able to comment on the various aspects of the buyer-supplier relationship, and more importantly, on the actual socially and environmentally responsible purchasing and supply practices in respect of that particular supplier.

5.2.4. Sampling frame

As opposed to many other studies in the field of RPSM the aim of this research was to examine the social and environmental supply chain performance on a broad cross-sectional basis, rather than focusing on a single industry.

In designing the sampling frame, it was believed that the companies which would be most interested in participating in such research and that would be relatively more concerned with RPSM issues were those that were perceived as relatively successful and subject to fulfilling a number of stakeholders’ expectations. Therefore, a decision was made to contact the largest companies with significant operations in Britain. In addition to an industry cross-sectional sample, this research also intended to examine RPSM practices through a cross-sectional sample in terms of ownership structure, and therefore the main sample consisted of all the firms on the FTSE, the thousand largest foreign-holding firms and the thousand largest unlisted firms. In addition, the largest firms from Germany, France, Scandinavia, Japan, China, India and South America were also targeted. It is however important to emphasise that the criterion for being considered to participate in the study, was that the participating firm must have significant purchasing and supply operations in the UK. More specifically, all participants had to have supply relationships were the “home” country was the UK, and therefore the focus of this research was on RPSM practices when firms buy into the UK. A list of the sampling group was obtained through FAME. The sample also included the membership base of the supporting association that had an interest in RPSM.
5.2.5. Contacting and obtaining firms for participation

The initial approach to recruiting participants was done by making contact with a number of associations that were believed to be interested in this type of research. These included the Chartered Institute of Purchasing and Supply (CIPS), Sustainability, Action Sustainability, SEDEX, and Business in the Community (BitC). However, in order to avoid conflict of interest, no financial support was received from these associations, or indeed any other association. The above named associations contacted their membership base and informed them about this research. Our contact person from the various associations also used their own network to encourage companies to participate. This approach also ensured that the sample was not exclusively consisting of large companies, but also included small and medium sized businesses.

In addition to creating contacts from the above associations, a set of other methods was used to make firms aware of our research and to recruit participants. Emails were initially sent out to the sample group, to the firms’ generic email address which was found on their website, i.e. email addresses such as info@, enquiries@. In the emails, the company was introduced to the research and asked kindly to circulate the information to anyone within the company who may be interested in participating. This procedure was repeated a number of times, and proved relatively successful in the early stages of the data collection process.

Following the emails, letters were sent out, which were addressed to the Procurement Director, to the entire sample group. In the letter, the potential participant was informed about the importance of the topic and the practicalities of participation. Participants were assured of full anonymity at all times. In addition, the receiver was informed about the number of participants already involved with the study and, with the permission of certain companies, the letters also gave examples of companies who were already participating in the survey, and this proved to be very successful. Each participant was promised a report, which they would be able to use to benchmark their RPSM activities, and also to learn from examples of best practice. Letters were sent out to the entire sample group three times, except for the companies that had explicitly declined to participate in the research.
A number of industry associations in the UK were also contacted, first through email and then by letter. Industry associations were asked to circulate information regarding the project to their membership base. Several associations, including The British Tobacco Manufacturing Association, The Publisher Association and The Garment and Textile Association, agreed to contact their membership base, and most of these associations also published a short article in their membership newsletter.

At the later stages of the data collection process, each participant who had completed both the online and the telephone interview part was contacted again and asked to circulate information of the study to their professional network. However, many of the participating companies were recommending each other to participate. Thus, it would have been more appropriate to utilise a similar snow-balling technique at an earlier stage of the data collection process. Presentations to various professional network groups were also made on several occasions, in order to spread information and to recruit participants direct.

A total of 228 companies agreed to participate; however only 198 companies completed the online survey and only 178 companies completed both the parts of the survey. A breakdown of participants’ job titles is given below, in table 9. As can be seen, the majority of participants were in a procurement position. For the remainder of the participants, who were not necessarily engaged in day-to-day activities with suppliers, the interviewer stressed that it was necessary for the participant to comment on specific buyer-supplier relationships. Only 4.5% of all participants were explicitly in an RPSM position, where their responsibilities were to consider the responsible purchasing and supply chain elements of their company.
Table 9 - Job Description of Participants

<table>
<thead>
<tr>
<th>Job Title</th>
<th>No of Participants</th>
<th>% of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement Director/Manager</td>
<td>123</td>
<td>69.1%</td>
</tr>
<tr>
<td>CSR Director/Manager</td>
<td>15</td>
<td>8.4%</td>
</tr>
<tr>
<td>Responsible Sourcing/Procurement/Supply Chain Director/Manager</td>
<td>8</td>
<td>4.5%</td>
</tr>
<tr>
<td>Commercial Director/Manager</td>
<td>5</td>
<td>2.8%</td>
</tr>
<tr>
<td>Environmental/Sustainability Director/Manager</td>
<td>5</td>
<td>2.8%</td>
</tr>
<tr>
<td>Quality, Health and Safety Director/Manager</td>
<td>5</td>
<td>2.8%</td>
</tr>
<tr>
<td>Production Director/Manager</td>
<td>4</td>
<td>2.2%</td>
</tr>
<tr>
<td>Category Manager</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>6.2%</td>
</tr>
</tbody>
</table>

Total 178

The 178 companies were recruited from a number of industries, which was the purpose of this research since existing research often focuses on a specific industry. As can be seen below in table 10, a number of companies from a range of industries participated in this research. In particular, it attracted participants from the banking and finance, electronics, energy and utilities, consumer goods and construction industries.
Table 10 - Industry Breakdown of Sample

5.2.6. *Non-response bias*

Non-response bias refers to the bias that occurs when the research only attracts respondents from one group of the universe, whilst ignoring other groups (Armstrong and Overton, 1997; Proctor, 2003). This, in turn, has implications for the statistical analysis. For example, this would occur if the research only attracted participants from companies that engaged in relatively proactive responsible purchasing and supply management, as it would not represent the universe since the group of companies that are reactive with respect to their RPSM activities has not been included in the sample. One method of testing for non-response bias is by comparing early and late participants’ responses (Armstrong and Overton, 1977; Lambert
and Harrington, 1990). This was done for both the socially and environmentally RPSM factors. A comparison was made between participants who responded to the first two waves of letters and the participants who showed an interest in the third and last set of letters that were sent out. Using the chow breakpoint test, no structural break was found between early and late respondents for either the socially or environmentally RPSM variable. The null for the chow breakpoint test is that there are no structural breaks, and given that the p-value for social was 0.73 and for environmental was 0.36, the test confirmed that there was no non-response bias in the sample.

5.2.7. Additional data

At an early stage of this research it was decided to supplement any primary data with secondary data, in order to make the statistical analysis more rigorous and in particular to avoid common source bias. This, sometimes also referred to as common method bias, can occur when the participant influences both the dependent and independent variable. If two or more variables are hypothesised to be related and “measured using the perceptions of the same individual”, then common source bias may occur (King et al., 2007, p. 459). It can also occur due to questions that are self-reported by respondents, and because of the “method effect” which is likely to be affected by the general context and the likelihood of social desirability bias (King et al., 2007). It poses a particular problem if the questions are subjective and if the respondent has a desire to be consistent or have an “explicit or implicit theory” (p. 459) of the relationship - even the participants’ mood state can influence common source bias\textsuperscript{13} (King et al., 2007). Interviewing Directors of Procurement, or participants in similar positions, it is very likely that they have an idea of the relationship between RPSM and the market environment in which they operate or its firm-specific resource. For example, tough industry environments are often, as noted in chapter 4, associated with limited financial resources. Therefore respondents

\textsuperscript{13} These data were collected just prior to the global financial crisis of 2008; it may therefore be likely that this environment was particular tough, and/or resources particularly scarce due to credit and lending issues. This may therefore also cause firms to respond differently to questions on resources and market environment conditions. In contrast, it is reasonable to assume that business strategy is a fairly constant issue, at least for the medium term.
may self-report that they are operating in a tough environment, which in turn could explain their relatively poor RPSM performance. In that case the respondent would use “tough markets” as a defence, or rather justification, for their RPSM performance.

For social science research, common source bias is a particular problem which can question the credibility and validity of the data, and existing research has consistently shown significant differences in regression results, once researchers control for common source bias (Cote and Buckley, 1988; Podsakoff et al., 2003).

Reflecting these concerns, additional data on firm-specific resources and market environment conditions were obtained from FAME and the Annual Business Inquiry (UK) survey. The specificity of this data will be further discussed in the appropriate empirical chapters.

5.3. Ethical considerations

The area of RPSM is an issue which in recent years has been subject to extensive scrutiny by the media, NGOs, governments and consumers, and a number of high-profile organisations have been negatively affected by the revelation of irresponsible purchasing and supply conduct. Therefore, a great deal of sensitivity had to be given to the individuals who were participating and the organisations they represented. This research has been conducted in line with the ethical guidelines from The School of Management of the University of Bath, which is based upon the Economic and Social Research Council’s (ESRC 2008) ethical research framework.

The Research Ethics Framework (REF) of the ESRC is based around six principles (ESRC 2008, p. 1), which have been considered in turn below.

1) Research should be designed, reviewed and undertaken to ensure integrity and quality.
The research was designed in such a manner that the time commitment of the participants was limited, without compromising the quality of the research. This was done by dividing the survey instrument into two parts. The first part consisted of an online questionnaire. Following the completion of this, the participant was contacted again to arrange for a telephone interview. The quality of the research was not compromised by dividing the survey instrument into two parts. In fact, it is believed that this only increased the reliability of the survey instrument, as the first part was often completed by a participant who was at the senior level. In contrast, the telephone interview, which dealt with individual buyer-supplier relationships, was conducted by a specific procurement manager, or account manager, who was able to comment on specific buyer-supplier relationships. Each participant was promised that their involvement in this project would not last longer than an hour. Where the telephone interview was prolonged the interviewer would ask the interviewee whether it was acceptable to continue or whether it was possible to re-arrange an interview time in order to complete the survey.

Post-completion of the data, a report was produced for each individual company that had participated, which gave them their social and environmental RPSM performance score, alongside the average scores for the industry, the firm size, company structure, company nationality, and sourcing country.

2) **Research staff and subjects must be fully informed about the purpose and risks involved with taking part in the research.**

In the recruiting stages, participants were provided with information concerning all the important aspects of the research, such as their time commitment and the issues that would be discussed during the two stages of the research process. Participants were informed about the benefits (a benchmarking report) and the cost (time) prior to them starting any part of the research.

3) **Confidentiality and anonymity of participants should be respected.**
Participants were ensured full anonymity and confidentiality at all times. On request participants were provided with a statement of confidentiality. This statement guaranteed confidentiality and also full anonymity to the individual and to the company they represented. However, it did not cover confidentiality to the particular industry, which was requested by one participant. This request was not granted, and a statement of confidentiality stating that the research did not cover the anonymity of the industry as a whole was sent to this particular participant.

4) *Participants must participate on a voluntary basis.*

All participants participated on a voluntary basis. Many of the participants were members of a signatory body such as the Chartered Institute of Purchasing and Supply (CIPS), SEDEX, or Sustainability. However, these bodies only contacted firms on the researcher’s behalf to ask them if they were interested in participating, and any interested parties were asked to contact the researcher directly if they wished to participate or learn more about the research.

5) *Harm to participants must be avoided.*

Not applicable for the purpose of this research.

6) *The research must be independent and not subject to conflicts of interest.*

To avoid any conflict of interest no financial support was received from any of the professional bodies that assisted in recruiting participants, and there was no conflict of interest between any stakeholders of this research.

7) *Other ethical considerations.*

- A database for those who declined to participate was created, in order to ensure that they were not contacted again.

- Personal data on the participants, such as email addresses and telephone numbers, along with interview transcripts and questionnaires, were securely stored. No sensitive data on the participant were obtained, as this was not deemed appropriate for the research.
There are some ethical issues regarding the way that companies were
contacted, as unsolicited emails were sent out on three different occasions.
However, these were mainly sent to the firms’ general email, and if the
respondent declined to participate they were immediately removed from the
mailing list.

Throughout this thesis a concerted effort has been made to ensure that no part
of the text is copied or subject to plagiarism by using the Harvard referencing
system; contribution by third-party author(s) will therefore be acknowledged
in the text.

This research has therefore been designed to comply with the ethical guidelines of the School
of Management, University of Bath, which in turn are based on the ethical framework of
ESRC. In designing this research and in recruiting participants several ethical considerations
were made. Amongst others, all participants were ensured full confidentiality and anonymity
throughout the research process and participants were only recruited on a voluntary basis. The
time commitment required by the participants to complete the survey was also reduced by
dividing the survey instrument into two stages, and participants’ responses were securely
stored on a database.
6. STYLISED FACTS AND DESCRIPTIVE EVIDENCE

6.1. Introduction

Having discussed the methodology that was used to collect information on firms’ RPSM engagement, this chapter will highlight some of the systematic patterns that were present in the data, with a view to shedding more light on the circumstances in which more sophisticated practices in respect of RPSM emerge. As such, the questions that are asked within this chapter can be phrased as: “What is the nature of RPSM practices among British firms?” and “under what circumstances do firms tend to undertake such activities?”

As a starting point, this chapter will first consider the construct of the dependent variables, which are: socially responsible purchasing and supply management performance and environmentally responsible purchasing and management performance. This will include an analysis of the mean performance score and distribution of the aggregate variable, before considering each of the five elements that have been used to create the complete dependent variable, as discussed in the methods chapter. Following on from this analysis, RPSM practices will be considered in terms of industry- and firm-specific characteristics. More specifically, this chapter will assess which industries are associated with both low and high performances of RPSM, and also consider if these practices are related to the size and ownership structure of the firm. Finally, the extent to which these practices are dependent on the country of purchasing (or supply origin) will be analysed.

6.2. The state of RPSM in the UK

Relatively little is known about the RPSM activities that firms undertake, and this is in particular the case in the context of UK firms. Some scholars have suggested that these activities are relatively limited (Preuss, 2001), while others have observed that such activities have become more sophisticated and developed into real practical processes (Walker et al.,
2008). Nonetheless, this research provides one of the most current representations of actual RPSM practices, and it is these practices and the dimensions of such activities that will be explored within this first section. In the methodology section it was described how the measurements of socially and environmentally responsible purchasing and supply management were constructed, and it was established that the five elements of requirements; rationale; problem process documentation; monitoring and performance dialogue were highly correlated and loaded on a single factor. However, what was not established was the extent to which firms are engaging in both social and environmental purchasing and supply management. To examine these actual practices, the distribution of the social and environmental purchasing and supply management scores is given in figures 12 and 13, respectively. The horizontal axis illustrates the RPSM score ranging from 1(bad) to 5(good), and the vertical axis is the frequency of scores.

Figure 12 - Distribution of the Social Score
Considering the socially RPSM score first, the frequency diagram shows that a very large proportion of the sampled firms do not appear to engage, or only engage modestly, in social issues within their supply relations. In contrast, the frequency diagram for environmentally RPSM shows that only a small proportion of the sample does nothing with respect to environmental purchasing and supply issues, and only very few companies are highly proactive in environmental issues. In comparison with the socially RPSM, the environmentally RPSM score suggests that firms are much more active and concerned about their environmental supply chain processes.

Although there was clear evidence to suggest that the five elements of both socially and environmentally responsible purchasing and supply management were highly correlated and loaded all significantly on a single factor, a closer examination of the individual dimensions reveals some interesting results. The mean of the individual dimensions is given in table 11. The first observation to be made is that along all dimensions, firms on average score higher in terms of their environmental efforts compared to their social purchasing and supply management efforts. For the social score, firms in particular scored relatively high on their social requirements and their problem process documentations. This is to some extent similar with respect to the environmental scores. Consistent for both the social and environmental
score is that monitoring is the lowest score. This suggests that firms may have relatively well developed policies in place and it may even be something that is discussed with suppliers, but minimal effort is made to ensure compliance of these policies or that requirements are being implemented.

Table 11 - Dimensions of Social and Environmental Purchasing and Supply: Means and Std. Dev.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std.Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Requirements</td>
<td>2.29</td>
<td>1.22</td>
</tr>
<tr>
<td>Social Rationale</td>
<td>2.23</td>
<td>1.08</td>
</tr>
<tr>
<td>Social Problem Process Documentation</td>
<td>2.30</td>
<td>1.08</td>
</tr>
<tr>
<td>Social Monitoring</td>
<td>2.12</td>
<td>1.11</td>
</tr>
<tr>
<td>Social Performance Dialogue</td>
<td>2.26</td>
<td>1.03</td>
</tr>
<tr>
<td>Environmental Requirements</td>
<td>2.49</td>
<td>1.01</td>
</tr>
<tr>
<td>Environmental Rationale</td>
<td>2.40</td>
<td>0.93</td>
</tr>
<tr>
<td>Environmental Problem Process Documentation</td>
<td>2.40</td>
<td>0.91</td>
</tr>
<tr>
<td>Environmental Monitoring</td>
<td>2.26</td>
<td>0.92</td>
</tr>
<tr>
<td>Environmental Performance Dialogue</td>
<td>2.37</td>
<td>0.91</td>
</tr>
</tbody>
</table>

A further observation from these scores is that there are some significant differences between the individual dimensions, as summarised in table 12. For example, with respect to the social scores, the monitoring dimensions are significantly lower compared to the other dimensions. Nonetheless, no significant differences are found between the remaining scores. In terms of the environmental scores, requirements are consistently higher than the other dimensions, and similarly to the social scores, monitoring is significantly lower than any of the other dimensions.
Table 12 - Significant Differences between Dimensions

<table>
<thead>
<tr>
<th></th>
<th>SOCIAL</th>
<th>ENVIRONMENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements and Rationale</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Requirements and Problem Process Documentation</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Requirements and Monitoring</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Requirements and Performance Dialogue</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Rationale and Problem Process Documentation</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Rationale and Monitoring</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Rationale and Performance Dialogue</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Problem Process Documentation and Monitoring</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Problem Process Documentation and Performance Dialogue</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Monitoring and Performance Dialogue</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

*Significant at the 95% confidence interval*

These observations show how monitoring is in particular a problematic issue for firms that seek to implement RPSM practices. Firms in general score high in terms of their requirements, which may be considered as a “soft” measurement of RPSM, but in terms of the “harder” dimensions, such as monitoring, but also performance dialogue, firms seem to be struggling to ensure that these elements are of the same standard as their other RPSM elements.

6.3. *Industry sector and RPSM*

Moving on from the dimensions and overall state of RPSM in the UK, this section seeks to explore how these activities are related to specific industries. Prior research has suggested that industry sector might play an important role in shaping engagement in RPSM, principally because the severity and type of social and environmental issues vary significantly across industries (Frenkel and Scott, 2002; Neef, 2004; Vachon and Klassen, 2006). Figure 14 provides the mean scores for each industry for both socially (blue) and environmentally (red) RPSM. With the exception of the retail and consumer goods industries, all industries are more actively engaged with environmental practices. Given the respective mean of 2.24 and 2.38 for social and environmental purchasing and supply chain performance, the industry averages also show that industries such as chemicals and pharmaceuticals, construction, banking, and
transport are in particular underperforming in terms of their RPSM efforts. In contrast the hi-tech and paper industries appear to be very proactive in terms of their environmental efforts, and similarly consumer goods and retailers are relatively proactive in RPSM.

**Figure 14 - Industry Means**

A closer inspection of the data, made by assessing the significance of differences between the RPSM scores between each industry (one-way ANOVA), confirms that certain industries are associated with relatively inactive and proactive RPSM practices - see figure 15. For example, retail is in particular proactive in terms of their RPSM practices, and to some extent this argument also extends to both the consumer goods and hi-tech industry. In terms of environmental efforts, the hi-tech industry again is very proactive, compared to most industries, except publishing and paper. These observations suggest that socially RPSM practices are much more diverse across industries. In contrast, environmentally RPSM practices are much more coherent across industries, and as such there are no industries, with the exception of the hi-tech industry, that perform either better or worse in terms of their environmental efforts.
**Figure 15 - Significance of Mean Differences across Industries**

<table>
<thead>
<tr>
<th>Social Purchasing and Supply Management Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
<tr>
<td>13</td>
</tr>
</tbody>
</table>

**Environmental Purchasing and Supply Management Score**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chemicals and Pharmaceuticals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Consumer Goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Banking and Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hi-Tech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Leisure and Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Publishing and Paper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Retail</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Transport</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Utilities and Energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Wholesale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NB. Shaded areas represent significant differences at the 95% confidence interval (two-tailed)
6.4. *Firm size and RPSM*

A stylised fact of the RPSM literature is that firm size is positively related to such practices (Min and Galle, 2001; Worthington et al., 2008; Zhu and Sarkis, 2004). The literature has highlighted two reasons for this relationship: first, firm size may reflect the visibility of the firm to external scrutiny (Bowen, 2002), and second, it may also reflect the extent of a firm’s resources and/or power (Brammer and Millington, 2006), which are factors that might be expected to reflect a capacity or capability to influence suppliers’ actions.

Table 13 - Firm Size and RPSM

<table>
<thead>
<tr>
<th>Size group</th>
<th>No of employees</th>
<th>N</th>
<th>Social Purchasing and Supply Management Score</th>
<th>Environmental Purchasing and Supply Management Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>Std. Dev.</td>
</tr>
<tr>
<td>1</td>
<td>1-249</td>
<td>19</td>
<td>1.92</td>
<td>0.90</td>
</tr>
<tr>
<td>2</td>
<td>250-999</td>
<td>27</td>
<td>2.17</td>
<td>1.11</td>
</tr>
<tr>
<td>3</td>
<td>1000-1999</td>
<td>31</td>
<td>2.20</td>
<td>0.84</td>
</tr>
<tr>
<td>4</td>
<td>2000-4999</td>
<td>55</td>
<td>1.97</td>
<td>0.94</td>
</tr>
<tr>
<td>5</td>
<td>5000-9999</td>
<td>44</td>
<td>2.23</td>
<td>1.06</td>
</tr>
<tr>
<td>6</td>
<td>10000-24999</td>
<td>46</td>
<td>2.27</td>
<td>1.23</td>
</tr>
<tr>
<td>7</td>
<td>25000-49999</td>
<td>44</td>
<td>2.04</td>
<td>0.74</td>
</tr>
<tr>
<td>8</td>
<td>50000-99999</td>
<td>43</td>
<td>2.66</td>
<td>0.93</td>
</tr>
<tr>
<td>9</td>
<td>100000+</td>
<td>31</td>
<td>2.71</td>
<td>0.90</td>
</tr>
</tbody>
</table>

The initial observation about the relationship between firm size and RPSM, as given in table 13, is that size does indeed seem to be positively related to both socially and environmentally responsible purchasing and supply management practices. The lowest average scores, in both the social and environmental case, are found in the first size group, which captures firms with 1-250 employees. Looking beyond the very small companies, there is some variation between average RPSM scores in terms of size groups 2-7. Nonetheless, the last two size groups (8 and 9) which represent firms with 50000-99999 and 100000+ employees respectively, have the highest scores both in terms of social and environmental efforts. These observations thus suggest that very small firms are relatively reactive, or even inactive, in terms of RPSM, but large, and certainly very large firms, are highly active in the field of RPSM. A further
observation is that among all these size groups environmental performance is more profound, with the exception of size group 8. The significance of differences between size groups, as given in figure 16, supports these observations.

**Figure 16 - Significant Differences across Firm Size**

**Social Purchasing and Supply Management Score**

<table>
<thead>
<tr>
<th>Size Group</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-249</td>
</tr>
<tr>
<td>2</td>
<td>250-999</td>
</tr>
<tr>
<td>3</td>
<td>1000-1999</td>
</tr>
<tr>
<td>4</td>
<td>2000-4999</td>
</tr>
<tr>
<td>5</td>
<td>5000-9999</td>
</tr>
<tr>
<td>6</td>
<td>10000-24999</td>
</tr>
<tr>
<td>7</td>
<td>25000-49999</td>
</tr>
<tr>
<td>8</td>
<td>50000-99999</td>
</tr>
<tr>
<td>9</td>
<td>100000+</td>
</tr>
</tbody>
</table>

**Environmental Purchasing and Supply Management Score**

<table>
<thead>
<tr>
<th>Size Group</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-249</td>
</tr>
<tr>
<td>2</td>
<td>250-999</td>
</tr>
<tr>
<td>3</td>
<td>1000-1999</td>
</tr>
<tr>
<td>4</td>
<td>2000-4999</td>
</tr>
<tr>
<td>5</td>
<td>5000-9999</td>
</tr>
<tr>
<td>6</td>
<td>10000-24999</td>
</tr>
<tr>
<td>7</td>
<td>25000-49999</td>
</tr>
<tr>
<td>8</td>
<td>50000-99999</td>
</tr>
<tr>
<td>9</td>
<td>100000+</td>
</tr>
</tbody>
</table>

*NB. Shaded areas represent significant differences at the 95% confidence interval*
6.5. Ownership structure

A firm’s ownership structure is also likely to influence its engagement with RPSM, either due to a reflection of exposure to particular regulatory pressures or a reflection of the possibility of idiosyncratic influence on firm strategies. Table 14 explores these possibilities.

Table 14 - Ownership Structure and RPSM

<table>
<thead>
<tr>
<th></th>
<th>Social (Mean)</th>
<th>Environmental (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 A State-Owned Company</td>
<td>2.40</td>
<td>1.98</td>
</tr>
<tr>
<td>2 A Private Company</td>
<td>2.17</td>
<td>2.35</td>
</tr>
<tr>
<td>3 A Company Listed on a Stock Exchange</td>
<td>2.22</td>
<td>2.34</td>
</tr>
<tr>
<td>4 A Family Controlled Company</td>
<td>2.50</td>
<td>2.51</td>
</tr>
<tr>
<td>5 A Multinational Company</td>
<td>2.24</td>
<td>2.45</td>
</tr>
<tr>
<td>6 A Wholly-Owned Subsidiary of an MNC</td>
<td>2.53</td>
<td>2.57</td>
</tr>
<tr>
<td>7 A Joint-Venture</td>
<td>2.72</td>
<td>2.78</td>
</tr>
</tbody>
</table>

One of the first observations to be made is that regardless of ownership structure, with the exception of state-owned companies, firms are more proactive in their environmental efforts. Furthermore, family-controlled, wholly-owned subsidiaries and joint ventures appear to be much more engaged with RPSM issues, both social and environmental. Nonetheless, no significant differences were found between the groups. As such there is no significant evidence to suggest that there is a relationship between ownership structure and RPSM.

6.6. Supplier location and RPSM

Finally, another stylised fact of the literature is that the geographical aspects of a supplier relationship are likely to affect engagement with RPSM, because they influence both the span of control involved in the relationship, and because they reflect the possible risks that reside in procuring from countries and regions with relatively weak, or weakly enforced, social and
environmental regulation (Millington, 2008). In the context of the data used for this research, table 15 explores this issue.

**Table 15 - Supplier Location and RPSM**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Social Purchasing and Supply Performance</th>
<th>Environmental Purchasing and Supply Performance</th>
<th>Significant difference (5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>34</td>
<td>3.21</td>
<td>2.50</td>
<td>YES</td>
</tr>
<tr>
<td>India</td>
<td>16</td>
<td>2.25</td>
<td>1.70</td>
<td>YES</td>
</tr>
<tr>
<td>South East Asia</td>
<td>21</td>
<td>3.14</td>
<td>2.75</td>
<td>NO</td>
</tr>
<tr>
<td>Others</td>
<td>17</td>
<td>2.55</td>
<td>2.44</td>
<td>NO</td>
</tr>
<tr>
<td>UK</td>
<td>172</td>
<td>2.00</td>
<td>2.36</td>
<td>YES</td>
</tr>
<tr>
<td>USA</td>
<td>25</td>
<td>2.11</td>
<td>2.40</td>
<td>YES</td>
</tr>
<tr>
<td>West Europe</td>
<td>55</td>
<td>2.00</td>
<td>2.43</td>
<td>YES</td>
</tr>
</tbody>
</table>

Distance, both culturally and geographically, seems to be a significant factor in shaping a firm’s RPSM engagement. With respect to social issues, these seem to be relatively neglected in Western countries, such as UK, USA and Western Europe; in contrast they are much more actively pursued in developing countries such as China and in South East Asia, with the exception of India. Furthermore, in Western countries the emphasis is to a much greater extent on environmental issues, and the opposite is true for developing countries where social issues play a significantly larger role than environmental issues.
Figure 17 - Significant Differences across Supplier Locations

The convergence of responsibilities, certainly social responsibilities, is also evident from the significant tests between the mean scores of each supplier location country, as explored in figure 17. These results verify the above arguments that social practices are much more profound in China and South East Asia. In contrast, there are few significant differences in terms of supplier location and environmental engagement. The results do however reveal that environmental efforts are relatively small when the supplier is located in India. It is also peculiar that social issues in India are not better, or worse, than when firms purchase from Western countries, given that socially RPSM practices are more profound in other Asian countries.
6.7. Conclusion

This chapter has provided an oversight of the data that were collected as a part of this research. Many of the key findings discussed above stem directly from the key features of this research, which include the sample size; companies from a wide range of industries; focus on both social and environmental issues; and supplier location. The key observations that have been made in this chapter include:

- Firms are, on average, more engaged with environmental aspects of RSPM than with social aspects of RSPM.

- Social aspects of RPSM are in particular a feature of the retail, hi-tech and consumer goods industries. Excluding retail and consumer goods, all industries emphasise environmental issues compared to social issues.

- Very large firms (employees of more than 50000) are significantly more active in terms of their RPSM efforts, compared to smaller firms.

- Ownership structure appear to have marginal influence, with family-owned, wholly-owned subsidiaries and joint ventures engaging more heavily with socially and environmentally responsible purchasing and supply issues.

- Supplier location, certainly with respect to social issues, is strongly related to firms’ RPSM efforts. The convergence of social responsibility seems to move from West to East. In contrast, environmental efforts are much more uniform across countries, except India, where these practices are largely neglected.
CHAPTER 7
7. INTRODUCTION TO EMPIRICAL CHAPTERS

7.1. Introduction

Whereas the previous chapter described some of the broad observable patterns in the data and revealed some interesting aspects of the RPSM in the UK, the following four chapters will empirically assess the conceptual framework developed earlier in chapter 4.

The first empirical chapter seeks to explore the role of industry environment in shaping RPSM. This chapter uses the theory of the industry life cycle to assess how firms’ RPSM practice might be influenced by different stages of the life cycle. It does not so much seek to understand if industry influences RPSM through either financial resources or business strategy, but rather to explore if there are any directly observable relationships between industry life cycle stages and RPSM engagement. In so doing, this chapter is related to propositions 1a and 3a and broadly explores the role of industry environment in shaping RPSM.

Chapter 9 explicitly tests proposition 3b, which suggests that RPSM is a direct function of financial resources. A slight distinction between this chapter and the conceptual development is that it also explores the extent to which financial resources influence strategic supplier development efforts, which in turn might influence RPSM, as suggested by proposition 2. Chapter 9 uses the concept of organisational slack, and argues that excessive slack increases discretionary, rather than strategic, spending on RPSM.

In chapter 10, both the direct and indirect role of business strategy on RPSM is examined. In so doing, this chapter explores propositions 1c, 1b and 2. Consistent with the conceptual framework, this chapter makes use of Porter’s generic strategies to understand firms’ engagement with RPSM. The argument that is pursued in this chapter is that RPSM is a way of differentiating the firm and signalling the quality of the product. Nonetheless, reflecting
recent writing in the supply chain literature, it also argues that business strategy influences the purchasing and supply “philosophy”, which in turn influences RPSM.

The final empirical chapter (11) integrates the themes of the previous empirical chapters through structural equation modelling and path analysis. In this chapter, all propositions are simultaneously examined, and as a way of extending the industry life cycle analysis, this chapter explicitly seeks to understand the way(s) in which the industry environment and industry-specific factors influence RPSM.

Consistent for the empirical chapters is the use of a set of theoretically derived control variables, which is believed to influence firms’ engagement with RPSM. These include the measurement of purchasing and supply “philosophy”, and the rationale for and construction of the control variables, which include: firm size; product importance; product complexity; power imbalance; supplier locations; and product and industry characteristics.

7.2. Purchasing and supply management “philosophy”

In the development of the conceptual framework it was noted that a common element of the following chapters will be the role that a firm’s purchasing and supply chain “philosophy” might have on its RPSM practices. The purchasing and supply chain “philosophy” is arguable a concept closely related to the purchasing and supply chain strategy. More specifically, the purchasing and supply chain “philosophy” arguably mirrors the firm’s strategic engagement with its purchasing and supply chain function. Nonetheless, constructing a variable that measures firms’ attitudes and the level of purchasing and supply sophistication is not a simple task. As the primary focus of this research is not on the influence and alignment of business strategy and purchasing and supply management, capturing purchasing and supply processes through a number of constructs did not seem sensible. For example, Cousins (2005) bases purchasing and supply strategies upon three different types of collaborations; operational; marketing and strategic. Cousins’s (2005) findings show that firms pursuing differentiation strategies tend to have strategic collaborative relationships with suppliers, rather than
operations and marketing collaborations which are the primary strategies of low-cost producers. However, Krajlic (1983) argued that strategic purchasing and supply management was a function of the complexity of the supply (product) and the importance of the supply (product). This view in turn suggests that even low-cost producers may engage in strategic supply management. Adapting the approach of Cousins (2005) does therefore not seem appropriate, as it fails to capture firms’ “attitudes” towards their purchasing and supply practice. For example, low-cost producers may find it more appropriate to collaborate with suppliers on operational and marketing issues, rather than enter into strategic partnerships, simply because the cost of doing so is too great. This, in turn, implies a continuum of strategic stances a firm can take towards its purchasing and supply chain function.

To capture a firm’s strategic stances towards its purchasing and supply chain function, i.e. it’s purchasing and supply chain “philosophy”, this research makes use of the concept of “supplier development”, which has been defined as (Krause and Ellram, 1997; p. 39):

“...any effort of a buying firm with a supplier to increase its performance and/or capabilities and meet the buying firm’s short and/or long-term supply needs.”

This concept is thus closely related to the firms’ attitude and the sophistication of the purchasing and supply chain processes. The strength of this variable is that it captures and measures respondents’ attitudes regarding supplier performance and the presence, or absence, of a proactive purchasing and supply chain philosophy (Kraljic, 1983; Krause all Ellram., 1997). Therefore, supplier development is a key strategic aspect of supplier relationship management in which firms need to invest (Wagner, 2006).

This variable is in particular an appropriate choice for this research, as it is consistent with the conceptual development, and in particular the classification of efficient versus effective supply chain stances. As noted, efficiency processes are concerned with relatively low cost processes, and this implicitly suggested low spending on training of suppliers’ personnel and investment in suppliers’ operations. The opposite is true for effective processes, where quality is paramount, and firms actively and heavily invest in suppliers to improve their performance.
One point worth making, however, is that firms can pursue both efficient and effective buyer-supplier relationships, and therefore these “philosophies” are not mutually exclusive. Nonetheless, this research is concerned with typical characteristics of certain companies, and hence it has been argued that efficiency is often associated with firms pursuing low-cost (cost leadership) strategies, and effectiveness is more often associated with firms pursuing differentiation strategies.

Based on the work of Krause et al. (2000), Krause and Ellram (1997) and Lee and Humphreys (2007), this survey captured a firm’s supplier development efforts, and uses this as a proxy for the firm’s purchasing and supply “philosophy” and strategy. Respondents were asked to rate, on a 7-point Likert scale, three questions related to their supplier development efforts, adapted from the above cited journal articles. The construct of this variable along with factor analysis, reliability analysis and distribution table is given below, in table 16.

Table 16 - Supplier Development, Factor Analysis

<table>
<thead>
<tr>
<th>Supplier Development - Adapted from Lee and Humphreys (2007)</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert scale 1-7: Strongly disagree vs Strongly agree</td>
<td></td>
</tr>
<tr>
<td>We use established guidelines and procedures when evaluating supplier performance</td>
<td>0.823</td>
</tr>
<tr>
<td>We perform site visits to supplier premises to help improve their performance</td>
<td>0.846</td>
</tr>
<tr>
<td>We invite supplier personnel to our premises to increase awareness of how their product is used</td>
<td>0.775</td>
</tr>
</tbody>
</table>

Cronbach alpha: 0.747

7.3. Control variables

As illustrated by the conceptual development in chapter 4, this research considers different levels of analysis and the relationship between strategic and managerial elements of these levels. Common for the purchasing and supply literature is that researchers tend to analyse the relationship between factors at different levels of analysis. Theoretically this is not problematic as long as the researcher makes appropriate use of control variables. Consistent
for the control variables used in this research is that they are all taken from research which has considered the relationship between factors at different levels of analysis. The preceding empirical chapters all make use of the same control variables including firm size; sourcing country dummy variables; buyer-supplier relationship length; product/supply importance; product/supply complexity; and buyer-power imbalance. Each of these control variables will be discussed in turn and a rationale for their inclusion will be given, alongside their respective measurement construction, factor analysis and reliability statistic.

7.3.1.  \textit{Firm size}

Firm size has in particular been suggested to be positively associated with socially and environmentally responsible practices. Among the arguments for this relationship is that larger firms have greater availability of financial and other resources to invest and engage in responsible business practices (Brammer and Millington, 2006; Udayasankar, 2008). In addition, firm size has been used as a proxy of visibility (Adams and Hardwick, 1998; Bowen, 2002), with larger firms being “more visible to external agents” and subsequently subject to a greater stakeholder pressure and scrutiny (Brammer and Millington, 2005, p. 34).

It is also evident from the RPSM literature that firm size positively influences the engagement with such practices (e.g. Carter and Jennings, 2004; Lee and Klassen, 2008; Zhu et al., 2008), and therefore this research controls for firm size by taking the natural logarithm of the number of employees.

7.3.2.  \textit{Country dummy variables}

Roberts (2003) raised the question of the boundaries of CSR in global supply chains. As noted in the literature review, most research on socially RPSM practices focuses on such issues in the context of developing countries (e.g. Locke et al., 2007; Yu 2008). In contrast, environmentally RPSM practices appear to be less contingent on characteristics of the product of origin. As this research focuses on buyer-supplier transactions in a global context, it
controls for the product/services’ country of origin. Dummy variables were created for the following countries and regions: USA, UK, Europe, China, India, and “Other”.

7.3.3.  *Buyer-supplier relationship length*

Cousins et al. (2006) argued that the performance of global supplier relations was a function of the relationship between buyer and suppliers, where the construction of social capital was the difference between high and low supply chain performers. Researchers have noted that the length of the buyer-supplier relationship can improve the performance and level of trust in the relationship (Coulter and Coulter, 2002; Doney and Cannon, 1997; Krause et al., 2000). These factors may in turn affect firms’ decisions to invest and implement RPSM practices into the supplier. Relationship length is measured as the natural logarithm of the number of years of trading between the buyer and supplier.

7.3.4.  *Product and supply complexity and importance.*

Kraljic (1983) argued that purchasing must move to supply management. He argued that factors which shape a buying firm’s efforts towards particular products and services were its relative complexity and importance. Accordingly, product complexity and importance are central to the strategic management of the firm’s supplier base. Cannon and Homburg (2001) also control for situational characteristics, including product and supply importance and complexity. Tables 17 and 18 show factor and reliability analysis.
Table 17 - Product Complexity, Factor Analysis

Product Complexity - Adapted from Cannon and Perreault (1999)

<table>
<thead>
<tr>
<th>Likert scale 1-7: Strongly disagree vs Strongly agree</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compared to other purchases your firm makes, the product/service is: simple vs. complex</td>
<td>0.944</td>
</tr>
<tr>
<td>Compared to other purchases your firm makes, the product/service is: complicated vs. uncomplicated (reversed)</td>
<td>0.947</td>
</tr>
<tr>
<td>Compared to other purchases your firm makes, the product/service is: technical vs. non-technical (reversed)</td>
<td>0.873</td>
</tr>
</tbody>
</table>

Cronbach alpha: 0.910

Table 18 - Product Importance, Factor Analysis

Product Importance - Adapted from Stump and Heide (1996)

<table>
<thead>
<tr>
<th>Likert scale 1-7: Strongly disagree vs Strongly agree</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>This item represents a major proportion of the end product’s value</td>
<td>0.884</td>
</tr>
<tr>
<td>This item represents an unimportant element of the end product</td>
<td>0.893</td>
</tr>
<tr>
<td>This item’s specification and quality have a large impact on the performance of the end product</td>
<td>0.864</td>
</tr>
</tbody>
</table>

Cronbach alpha: 0.854

7.3.5. Power imbalance

One of the reasons this survey controls for firm size is due to the fact that it has been suggested to be associated with organisational power. However, power and dependence between the buyer and supplier have also been argued to be a key facilitator of buying firms’ ability to implement RPSM processes. Preuss (2001) and Hall (2000) argue that relative buyer power will increase the level of RPSM, predominantly because it can “force” suppliers to comply with any RPSM requirements. Millington (2008) notes that the issue of power-dependency is crucial for RPSM implementation, and argues that asymmetric power-dependency, in favour of the buyer, increases the likelihood of successful RPSM implementation.
To capture buyer and supplier power, and the power imbalance in the relationship, two sets of constructs were first established based on supplier dependence and buyer dependence, adapted from Ganesan (1994) and Sezen and Yilmaz (2007). See tables 19 and 20 for factor and reliability analysis.

**Table 19 - Supplier Dependence, Factor Analysis**

<table>
<thead>
<tr>
<th>Supplier Dependence - Adapted from Ganesan (1994)</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert scale 1-7: Strongly disagree vs Strongly agree</td>
<td></td>
</tr>
<tr>
<td>We are important to this supplier</td>
<td>0.892</td>
</tr>
<tr>
<td>We account for a large proportion of this suppliers’ total sales</td>
<td>0.926</td>
</tr>
<tr>
<td>If we stopped buying from this supplier they would find it difficult to fill the gap in their order book</td>
<td>0.887</td>
</tr>
<tr>
<td>Cronbach alpha: 0.879</td>
<td></td>
</tr>
</tbody>
</table>

Principal Component Analysis

**Table 20 - Buyer Dependence, Factor Analysis**

<table>
<thead>
<tr>
<th>Buyer Dependence - Adapted from Ganesan (1994)</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likert scale 1-7: Strongly disagree vs Strongly agree</td>
<td></td>
</tr>
<tr>
<td>This supplier is crucial to our future performance</td>
<td>0.842</td>
</tr>
<tr>
<td>It would be difficult for us to replace this supplier</td>
<td>0.903</td>
</tr>
<tr>
<td>We are dependent on this supplier</td>
<td>0.876</td>
</tr>
<tr>
<td>We do not have a good alternative to this supplier</td>
<td>0.719</td>
</tr>
<tr>
<td>Cronbach alpha: 0.857</td>
<td></td>
</tr>
</tbody>
</table>

Principal Component Analysis

Subsequently, the power imbalance variable was constructed by following the approach of Casciaro and Piskorsk (2005), which involves subtracting the “buyer dependence” from the “supplier dependence” variable. A positive value of this construct suggests that the buyer has a relatively dependency advantage over the supplier and vice versa.
7.3.6. Industry dummy variables

Strategic management, and in particular business strategy, is notoriously connected to the industry environment – and certainly if one views strategy from the classical and industrial economic perspective. In both the corporate social responsibility and supply chain literature industry characteristics are often controlled for through a binary dummy variable which takes the value 1 if the respective firms belong to that industry, otherwise 0 if the firm does not belong to the particular industry. In the strategy literature, however, industry dummy variables are often ignored, or at least unspecified (Dess et al., 1990). Categorising industries through the traditional approach often relies on the Standard Industry Classification (SIC), but such industry categorisations often have little theoretical grounding. In contrast, this thesis uses a set of theoretically derived binary variables that seek to capture industry effects. This approach has the merit of minimising the multicollinearity issues in the regression analysis presented in the proceeding chapters, while also capturing specific and dynamic elements of industry that were believed to influence significantly a firm’s propensity to engage in both socially and environmentally responsible purchasing and supply management. The following analysis therefore makes use of a binary sector variable (B2C/B2B) that seeks to control for firms’ (and their products’) proximity to consumers. This variable is included to assess partially proposition 4. In addition, six distinctive binary variables that seek to capture and understand the role of “being in” and “procuring from” a socially or environmentally sensitive industry, will be used throughout the following analysis. The theoretical justification for this breakdown is discussed below.

Business-to-consumer/business-to-business: Brand and reputation management has often been suggested to be associated with corporate social responsibility (e.g. Brammer and Pavelin, 2004; Fombrun, 2005; Lewis and Director, 2003). Nevertheless, classification of brand based on the underlying characteristics of the transaction is often ignored in both the conceptual and empirical CSR literature. In terms of branding, business markets and consumer markets differ considerably. B2B markets/producers ultimately exist to serve other businesses, but a direct classification of B2C and B2B firms is problematic for a number of reasons. For example, McCarthy and Norris (1999) note the problem of categorising ingredient brands as the appeal
to the individual in the role of the consumers, even though they are being sold to other businesses (retailers). In this case, the B2B “angle is mediated by the role of the consumer” (Pfoertsch et al., 2007, p. 5). For the purpose of this research, following Kotler et al. (2010) and Pfoertsch et al. (2007), B2C is categorised as any firms whose business activities are concerned with serving end-users with a product or a service. It may be that the sale of the product is not directly realised with the consumer but mediated through a “middle-representative”, such as a retailer. Firms in this category direct their marketing efforts at the end-consumer and aim at a mass market. Convincing consumers to purchase due to the brand is common. In contrast, B2B is categorised as any firms whose business activities have no direct link with the final end-consumer, and as such these firms/products are “aimed at intermediate value provider[s]” (Pfoertsch et al., 2007, p. 5). Furthermore, in the B2B sector branding is not sufficient for a sale, but it may initiate negotiations between the parties (Pfoertsch et al., 2007). Making the distinction between B2C and B2B is important because branding arguably plays a greater role in B2C markets, and unobservable product qualities and features, including CSR and RPSM, are more common in the B2C sector in order to entice consumer trial and encourage purchase (Kotler and Lee, 2005).

In distinguishing between B2C and B2B the researcher used three sources of information: 1) the Bureau Van Dijk database; 2) the Standard Industry Classification (SIC) manual; 3) the firm’s own website.

Environmentally sensitive products and industries: The aim of including an environmentally sensitive product and industry dummy variable is to control for firms that are notoriously environmentally damaging/impactful, such that this group of firms/industries does not skew the regression analysis. Furthermore, including such a variable has the aim of highlighting how these firms and industries are dealing with their suppliers in terms of their environmental efforts. One hypothesis would be that firms that either “operate in” or “procure from” an environmentally sensitive industry are more proactive in terms of their environmentally RPSM efforts, due to stakeholder pressure and tighter environmental regulations. Alternatively, these firms may intrinsically be “dirty” and simply ignore any environmental supply practices.
In developing a list of environmentally sensitive products and industries, this research makes use of established lists of “dirty” industries. Conventional approaches have defined “dirty” industries in accordance with levels of abatement expenditure per unit of output, or by selecting industries based on their actual emission per unit of output. Through this approach Mani and Wheeler (1998) identify the following industries as being “dirty”: iron and steel; non-ferrous metals; industrial chemicals; pulp and paper; and non-metallic mineral products. These industries are however specific to the manufacturing sector and Jänicke et al. (1997) note similar industries paper and paperboard; petroleum products; primary metals; stone; clay; glass and chemicals as being particularly environmentally impactful in the manufacturing sector. Nevertheless, Jänicke et al. (1997, p. 468) also note that researchers should also consider industries outside the manufacturing sector, suggesting that electricity production, mining and road transport should be “added to the list of heavy polluters”. This classification of environmentally sensitive industries reflects previous studies in the field of environmentally responsible purchasing and supply chain management (e.g. Hall, 2001; Preuss, 2001), and hence this research makes use of the following list to establish whether a firm is either “producing in” or “buying from” an environmentally sensitive industry: iron and steel; non-ferrous metals; chemicals (including pharmaceuticals); non-metallic mineral products; mining; paper and pulp; electricity production; transportation (air, road, sea).

Socially sensitive products and industries: Similar to the environmentally sensitive product and industry dummy variable discussed above, incorporating a socially sensitive product and industry dummy variable into the future analysis, seek to control for industries that have been associated with a range of social issues. In contrast to environmentally sensitive products and industries, socially sensitive products and industries are particularly difficult to classify. Firstly, there are no universally accepted lists of socially sensitive industries available from UN Global Compact, Global Reporting Initiative or the Suppliers Ethical Data Exchange. Secondly, earlier research has categorised industries as socially sensitive depending on their externalities, and as such have considered the tobacco, alcohol, defence, and gambling industries as being socially impactful (Brammer and Millington, 2004).
Nevertheless, focusing specifically on supply chain related issues, there are a number of industries that have been associated with poor working conditions and issues related to human rights and child labour, which are not necessarily related to geographical location – the case of sweatshops in East London is a case in point (Graves, 2003). Furthermore, consumers are unlikely to make a distinction between the geographical location of the supplier and the extent to which the firm is operating in socially sensitive industries. For example, there are no immediate social externalities associated with the apparel and textile industry. Only because such items are often produced in less developed countries that lack appropriate institutional frameworks, has the apparel and textile industry become a socially sensitive industry, and the same applies for the food and drink sector. Nevertheless, because of the close association with developing countries, certain industries have been categorised as socially sensitive. Case study research in the field of socially responsible purchasing and supply chain management often focuses on the activities of the apparel, textile, leather, food and drink industries because their supply chains often have roots in developing countries (Amaeshi et al., 2008; Blowfield, 2003; Maloni and Brown, 2006; Mamic, 2005; Roberts, 2003; Seuring et al., 2005). In addition to the textile, garment, footwear and agriculture (specifically food and drinks) industries, Neef (2004) also argues that light goods manufacturing is a socially sensitive industry, because such products, which include soft and plastic toys, footballs, carpets and handicraft, are almost entirely dependent on labour from developing countries. An estimated 70 percent of these goods are created by subcontractors in India alone, and this industry contains all the potential criteria for social exploitation, being characterised as “large subcontractor networks, low skills, low wages, child labour, exposure to chemicals, and home-based workers” (Neef, 2004, p. 50).

One further industry warrants inclusion in the list of socially sensitive industries: retailers, specifically retailers that are involved in the above discussed industries. Increasingly, retailers and supermarkets are not only procuring from socially sensitive industries, but are carrying their own in-house brand names, and because of their connection and sole dependency on suppliers, they are often directly involved in the production process of these goods. In addition a number of case studies have illustrated the range of social issues, specifically pertaining to
the supply chain, to which food/drinks and textile retailers are often subject to (Ansett, 2007; Crane, 2001; Hughes, 2001; Pretious and Love, 2006).

Hence the following industries are considered to be socially sensitive, regardless of whether the firm “procures from” or “operates in” the following industries: apparel, textiles, leather, food, drink, agriculture, light goods manufacturing (including merchandise), and retailers of food, drink and textile items.

Given this discussion, this research will make use of the following control variables: When examining socially responsible purchasing and supply activities, this research uses binary variables to control for firms operating in the B2C sector, and binary variables that measure whether the given firm is “procuring from”, “operates in” or is “procuring and operating in” a socially sensitive industry. Similarly, when examining environmentally responsible purchasing and supply activities, this research uses binary variables to control for firms operating in the B2C sector, and binary variables that measure whether the given firm is “procuring from”, “operates in” or is “procuring and operating in” an environmentally sensitive industry.
CHAPTER 8
8. INDUSTRY LIFE CYCLE AND RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT

8.1. Introduction

As noted in the research agenda, the existing RPSM literature often seems to have a relatively narrow focus in terms of assessing these practices within a specific industry, such as the paper and pulp industry (Vachon and Klassen, 2006), the furniture industry (Walton et al., 1998), the automobile industry (Beske et al., 2008; Zhu et al., 2007a), the food industry (Hall, 2001; Maloni and Brown, 2006), or manufacturing (Carter, 2005; Zhu et al., 2008). It is therefore unclear how well these findings generalise to other industries, and it is also unclear what aspects of an industry influence its RPSM engagement. To address this issue and to assess how the dynamics of the industry environment influence RPSM, one of the key features of the conceptual framework presented in chapter 4 were the central role of the industry environment in shaping RPSM, but as of yet little is known about how the industry environment may shape the engagement of such practices. This chapter draws upon the theory of the industry life cycle (ILC) and it develops a set of testable hypotheses that seek to describe the theoretical relationship between ILC and socially and environmentally responsible practices.

In so doing, this chapter provides the first building-block of the conceptual development and seeks to examine the following questions: “does industry environment, as captured by the ILC, influence responsible purchasing and supply management practice?” If so, “what is the nature of this relationship and under what circumstances will the industry environment influence RPSM?”

This chapter will first give a brief overview of the theory of the ILC and assess how different stages influence firms’ strategic behaviour, and also how the ILC influences the purchasing and supply chain practices of the firm, along with the firm’s strategic engagement with CSR. Based on the literature a conceptual model will be presented and a set of hypotheses will be developed which addresses the relationship between ILC and RPSM. This will be followed by
a brief methodology section, which will explain the method for operationalising ILC stages. This section will be followed by an analysis and discussion of the statistical results, before outlining the practical implications of this research and the opportunities for further research.

8.2. *Theory and hypothesis development*

Research has identified a number of stylised features of ILC. A typical life cycle assessment consists of four to six stages, but often a four-stage life cycle is adopted with the stages of introduction, growth, maturity and decline (Birou et al., 1997; Golder and Tellis, 2004; Rink and Swan, 1979). During the product development stage there is a limited sale but high cost of investment. As the product industry develops (introduction stage), sales slowly increase, but there are still low or negative profits due to few consumers and heavy sales promotion to entice trial. At the growth stage there is a rapid increase in sale, and profit starts to rise. At this stage there is also an increase of competitors into the industry. The aim of the firm is to maximise market share and penetrate the market at this stage. As the sale of the product and industry stabilise, the firm and the industry enter into the maturity stage, where there is a stable number of competitors, and unprofitable firms may leave the market. Compared to other life cycle stages, the standard models of ILC emphasise the importance of differentiation at the maturity stage in order to encourage brand switching. The final stage is the decline stage, where sales start to fall. In order to maintain profit margins, costs associated with R&D and advertising are reduced. The firm may also attempt to revive the ILC by offering a new product to the market or by offering new features of the product (see Birou et al., 1997; Golder and Tellis, 2004; Kotler et al., 2010, p. 571-582; Rink and Swan, 1979).

Hofer (1975, p. 798) argued that the life cycle is “…the most fundamental variable in determining an appropriate business strategy…” Throughout the stages of the ILC, firms’ strategy changes and the ILC influences the firms’ outlook, product design, pricing, marketing efforts and financial performance and abilities (Birou et al., 1998; Hofer, 1975; James, 1974; Wasson, 1975).
Empirical research has verified the importance of the ILC in shaping firms’ strategy, and has shown that the ILC is a predictor of firms’ ability to survive in an industry (Agarwal et al., 2002; Klepper, 1997), and it also influences the competitive landscape, in terms of both the number of competitors and of the variation of business strategies of competitors in the market (Beldona et al., 1997; McGahan and Silverman, 2001). Empirical evidence has also shown that firms are more innovative in the early stages of the ILC, and yet the numbers of patent grants are greater during the maturity stage, compared to the introduction and growth stages (Braguinsky et al., 2007).

However, the ILC has also been argued to influence firms’ purchasing and supply chain procedures, along with their focus on corporate social responsibility issues, as will be reviewed in the following two sections.

8.2.1. Conceptual model

This study views firms’ RPSM efforts as being a function of different stages of the ILC. In developing a conceptual framework for this particular study, and relating it back to the main conceptual framework presented in chapter 4, it argues that different industry stages are associated with particular business strategies, which in turn influence firms’ engagement with RPSM. In so doing, this research implies that ILC influences business strategy (proposition 1a), which in turn directly (proposition 1b), and/or indirectly (proposition 1c) influences RPSM, through its influence on the general purchasing and supply chain processes of the firm (proposition 2). This relationship is illustrated in figure 18.
The following two sections seek to further the above discussion and develop a set of testable hypotheses about the relationship between ILC and subsequent RPSM efforts.

8.2.2. *Industry life cycle and corporate social responsibility*

Although limited, some research has conceptually considered the relationship between the external market environment and firms’ corporate social responsibility (CSR) performance. McWilliams and Siegel (2001) specifically relate ILC stages to a firm’s differentiation strategy and its subsequent CSR performance. They argue that firms can use CSR as a method of differentiating the product and to signal their quality and trustworthiness. In particular, they state that firms producing experience goods, i.e. products/services where the quality is not revealed prior to consumption, can enhance both firm and product reputation through CSR initiatives. McWilliams and Siegel (2001) further argue that at the early stages of the ILC, firms are focusing on perfecting the product design and process and satisfying growing demand. However, as the industry matures and growth rates stabilise, the market becomes more sophisticated and the role of product differentiation increases. At the maturity stage of the ILC, firms may therefore attach CSR attributes to their product as a way of differentiation.
Other conceptualisations of the industry environment, including ILC stages and CSR efforts, follow the same logical arguments of McWilliams and Siegel. For example, Husted and Allen (2007) suggest that industries characterised as having a high level of growth and being highly dynamic will have relatively low levels of CSR performance, because corporate efforts focus on tangible product differentiation. However, as the industry environment stabilises and as price competition intensifies, traditional product differentiation activities become difficult to justify and undertake. Firms in these industry environments will therefore seek to differentiate themselves through “strategic social positioning” and engage actively in CSR activities, both domestically and abroad (Husted and Allen, 2007). Sethi and Sama (1998) also argue that a firm’s propensity to engage in proactive CSR processes depends on the structure of the industry, in terms of the ILC, and propose that firms in an environment of high growth economic activities will engage in proactive ethical and social activities in order to create a competitive advantage, through consumer loyalty, differentiation and stakeholder management. Similarly, firms in stable and mature environments will tend to be actively involved in CSR strategies, particularly if they cannot conceal their wrongdoings and if they have market power. In contrast, entrepreneurial firms in competitive environments may conduct either very ethical or very unethical practices, depending on the resources of the firms and the firms’ business strategy. As such, entrepreneurial firms may either be proactive or inactive in terms of their CSR and RPSM efforts, because the entrepreneur is operating in an environment where “personal fortune is closely tied to the firm’s success”, so entrepreneurs might “cut corners” and act unethically or behave very ethically because it is part of their values and business strategy (Sethi and Sama, 1998, p. 98).

Bagnoli and Watts (2003) also acknowledge the importance of the industry environment in shaping firms’ strategy and their CSR activities. Similarly, Van de Ven and Jeurissen (2005) suggest a direct relationship between the firms’ business environment and a firm’s competitive strategy which in turn will influence their attitudes and focus on ethical issues.

These conceptualisations, however, focus on the relationship between CSR and the industry environment, rather than the relationship between RPSM and the industry environment. An assumption of the following hypotheses is therefore that CSR and RPSM are closely related.
Indeed, recent research has not only emphasised the role of RPSM as part of the CSR concept (Polonsky and Jevons, 2006), but also suggested that responsible business tends to have well-developed RPSM processes (Tate et al., 2010).

Therefore, reflecting the above arguments, it is hypothesised that:

Hypothesis 1: Firms in a rapidly growing and early industry life cycle stage have relatively low levels of responsible purchasing and supply management performance.

Hypothesis 2: Firms in a stable industry, and thus in the maturity stage of the industry life cycle, have relatively high levels of responsible purchasing and supply management performance.

Hypothesis 3: Firms in declining industries will have moderate responsible purchasing and supply management practices in place. Firms in these industries will have better responsible purchasing and supply management performance than firms in the introduction stage, but poorer responsible purchasing and supply management performance than firms in the maturity stage of the industry life cycle.

8.2.3. **Industry life cycle and supply chain management**

Several conceptual contributions have explored the relationship between ILC and purchasing and supply chain strategy. One of the first attempts to develop a theoretical connection between purchasing and supply management and product/industry life cycle was Berenson (1967). He argued that the life cycle should be used as a planning tool for the purchasing decision, since the life of a product category represents different market conditions. Therefore, firms “can [profitably] use the concept of the product life cycle as a basis for creating many of their planning, managerial, and administrative duties” (Berenson, 1967, p.63, see also Rink, 1976). Since Berenson (1967), a number of authors have stressed the role of the product and
industry life cycle in shaping the role and the importance of the firm’s purchasing and supply management activities. Although the ILC is a fairly mature concept in strategic management, recent writing has also highlighted its importance in shaping purchasing and supply management systems and procedures. For example, Aitken et al. (2003) argued that as the product goes through various stages of the life cycle, the emphasis on suppliers shifts from one that is focused on cost to one that is focused on quality, service level and lead time. Narasimhan et al. (2006) also acknowledge the influence the life cycle may have on the procurement function, and that purchasing criteria change as the industry goes through the various stages and in an environment where the supply chain is vital for corporate success the ILC is a good measurement for various market conditions.

According to the normative work of Berenson (1967), firms should at the introduction phase seek suppliers that are flexible, have good technical expertise and can accept minimum orders to keep inventory low during the introduction stage. Fox and Rink (1978) argue that during the design and introduction stage, (out)sourcing activities are at a minimum and most production and assembling is undertaken within the company to “prevent disclosure to competitors” (p. 189). At the introduction stage the purchasing function is in itself in its infancy and during this stage efforts are geared toward developing and finding appropriate suppliers. At this point suppliers are chosen due to their technological know-how and because they can assist the buying firm in developing and improving the quality/reliability of the product (Fox and Rink, 1978). Birou et al. (1997) argued that in the design and introduction stages, the purchasing and supply chain function is decentralised and decisions are limited to single sourcing and make/buy analysis.

The key supply chain issues in the growth stage centre around cost reduction and competitive bidding, along with questions of supplier development and global sourcing (Birou et al., 1997). During the growth stage, the importance of the purchasing function increases. The aim here is to develop new suppliers that are dispersed geographically to satisfy demand (Berenson, 1967).
During the maturity stage, the purchasing and supply function undergoes a dynamic transformation, with the supplier base and the departmental function itself expanding. Supply management at this stage is concerned with developing the supplier base and dealing with problems of temporary shortage and shipment delays (Fox and Rink, 1978). During the maturity stage, the purchasing and supply function efforts are focused on making the supply chain more efficient with automatic reordering processes and by implementing quality standards (Fox and Rink, 1978; Birou et al., 1998). The maturity stage is also characterised as a stage with high levels of competitive pressure, and the purchasing function adjusts its buying criteria to conform to customers’ buying criteria, which in turn are subject to society’s requirements and may include issues of “recycling and other disposal of residues” (Fox and Rink, 1978, p. 191). During the maturity stage, the aim of the purchasing and supply chain managers are also to “weed out weak suppliers”, and enter into favourable long-term supply contracts. At this time, buyers should be cautious about low-price suppliers, because quality is paramount at this stage to maintain the customer base. In addition, as the firm enters the maturity stage, it undertakes more extensive global sourcing activities and may start to engage in minority supplier programs (Berenson, 1967; Rink, 1976).

At the saturation and decline stages, the key strategic element of the purchasing function is to reduce “out-of pocket expenses” and to consider low cost substitute goods and services. At this point firms should focus on ending supplier relationships and the purchasing function should start focusing on other products that are at different life cycle stages (Berenson, 1967). At the decline stage, the purchasing department reduces all possible expenditures as well as inventories and services. However, after the firm leaves the market, it is still liable for any personal or ecological harm and so any such records should be stored in case of legislative proceedings (Fox and Rink, 1978). Therefore, when the industry and product are close to the end of their commercial life the purchasing and supply chain function becomes a neglected issue by top management. As such the sophistication and importance of purchasing and supply management systems will fall dramatically (Birou et al., 1997).

Despite this literature, Rink (1976) warned that the traditional representation of ILC, as discussed above and given in figure 19, is a general one for illustrative purposes, and its
shapes and characteristics may differ depending on the industry. Therefore, firms’ need to consider if their product follows the standard bell-shaped ILC before applying the strategies discussed above.

The above discussion indicates that RPSM may be a function of the state and development of the purchasing and supply chain activity, which is influenced by the ILC, rather than a direct function of changes of the business strategy over the ILC. For example, Rink and Fox (1999) relate specific purchasing strategies to the stages of the product/industry life cycle. In their conceptualisation of appropriate purchasing strategies of different life cycle stages, they argue that there is very little emphasis on social responsibility during the pre-introduction and introduction stage. At the early stages of the ILC the responsible focus is only on developing ethical and professional standards amongst the personnel. As firms enter the growth stage they should consider purchasing from local and minority suppliers, while also trying to reduce waste and usage of material during production. During the maturity stage, ethical issues have shifted away from educating the personnel, to actively ensuring appropriate corporate social behaviour on the part of the supplier, hence ensuring that suppliers are complying with laws. They should also be collaborating with suppliers to discover new ways of reducing pollution and increasing recycling possibilities (Rink and Fox, 1999). Focusing specifically on CSR in the supply chain, Sarkis (2003) argued that in the initial stages of the ILC, firms are developing and designing their products and any environmental processes are incorporated into the design of the product. However, as the industry matures and declines, the emphasis shifts from design and product-based environmental approaches to more sophisticated and comprehensive methods of dealing with environmental supply chain issues. Therefore during the mature and declining stages of the ILC, firms attempt to improve operational efficiency to eliminate waste and environmental impact and may start to engage in reverse logistics practices (Sarkis, 2003).

Given the above and previous discussion there are therefore two arguments for the ILC-RPSM relationship. One argument relates to the initial discussion outlined in this chapter regarding the use of CSR and RPSM to differentiate the product and the firm. As such RPSM becomes a part of the business strategy. The other argument suggests that, rather than being a part of the
business strategy, RPSM is related to the purchasing and supply strategy and the overall development of the purchasing and supply function over the ILC. Reflecting these two arguments, it is hypothesised that:

**Hypothesis 4a:** The influence of industry life cycle on firms’ responsible purchasing and supply management performance is due to changes in the strategic behaviour of firms, and due to the use of corporate social responsibility as a method of differentiation.

**Hypothesis 4b:** The influence of industry life cycle on firms’ responsible purchasing and supply management performance is a function of the development of more sophisticated procurement and supply chain practices, which will develop along the industry life cycle.

Whereas hypotheses 1-3 explain the level of RPSM engagement, hypotheses 4a/b seek to understand the reason for this relationship.

### 8.2.4. Target market

In line with proposition 4 of chapter 4, the influence of ILC on RPSM engagement might be moderated by target markets and whether the firm is operating in a B2C or B2B market. As established earlier, firms operating in a B2C market have been subject to considerably more scrutiny and pressure to engage in responsible business practices. As such, RPSM has arguably become much more of a strategic issue for this group of firms, either due to motivations of legitimacy or differentiation, or both. Given this, the role of ILC with respect to influencing the business strategy and subsequent RPSM performance may be moderated by the target market. More specifically, it might be anticipated that the B2C market positively moderates the ILC and business strategic role in shaping RPSM, hence:

**Hypothesis 5:** The relationship between ILC stages and responsible purchasing and supply management relationship is moderated by the target market. More specifically,
the industry life cycle and responsible purchasing and supply management relationship is comparatively stronger in the business-to-consumer sector than in the business-to-business sector.

A strong relationship between ILC and RPSM would therefore support the argument that ILC influences business strategy, which in turn influences RPSM. In contrast, an insignificant relationship between ILC and RPSM, when controlling for supplier development, would suggest that business strategy has an insignificant role in shaping RPSM practices, if supplier development is associated with improved RPSM.

Figure 19 provides a summary of the main elements in terms of supply practices, CSR and RPSM across the industry life cycle. However, a number of assumptions of the conceptual model and the hypotheses are worth noting before continuing the analysis. For example, although an industry might be in its maturity stage, firms may still enter the industry with a product that is slightly different from competitors, and individual companies might experience high levels of growth. However, the conceptual model focuses specifically on ILC and not product life cycle. Yet, the assumption is that these two are strongly correlated, which is very plausible, since industry growth and lifecycle are an average of the growth and product lifecycle of all firms competing in a given industry. A further assumption of the model is that firms are indeed using CSR initiatives as a way of differentiating, and enhancing their products. This too seems fairly reasonable given the literature review above, which highlighted that a number of authors have suggested that the industry environment shapes a firm’s business strategy and its subsequent CSR performance. The final assumption behind this model is that firms’ RPSM practices are closely tied to their general CSR practices. The model presented therefore assumes that RPSM is an integrated part of a firm’s strategic use of CSR. Again, given the increasing amount of attention RPSM has received in recent years due to extensive stakeholder demands and expectations, and given the earlier assumption of the strategic use of CSR, it is believed that this assumption is a realistic one.
**Figure 19 - The Relationship between ILC, Business Strategy, Supply Processes and RPSM**

<table>
<thead>
<tr>
<th>Industry life cycle characteristics</th>
<th>Introduction</th>
<th>Growth</th>
<th>Mature</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low sale and (no) profit</td>
<td>Rapid sales increases</td>
<td>Maximum sales and profits</td>
<td>Sales and profits decline</td>
<td></td>
</tr>
<tr>
<td>Few competitors</td>
<td>New entries</td>
<td>Many and strong competitors</td>
<td>Firms leave the market</td>
<td></td>
</tr>
<tr>
<td>High levels of uncertainty</td>
<td>Competition intensifies</td>
<td>Well-established firms stay only</td>
<td>Or revive the ILC through new products</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Firm strategy</th>
<th>Centralised</th>
<th>Centralised</th>
<th>Centralised</th>
<th>Centralised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplified product versions</td>
<td>Penetrate market</td>
<td>Develop suppliers and long-term contract negotiations</td>
<td>Reduce out-of-pocket expenditures,</td>
<td>Decentralised</td>
</tr>
<tr>
<td>Heavy price promotion, to entail trial</td>
<td>Establish brand position and tangible differentiation</td>
<td>Intangible differentiation</td>
<td>Cancel supplier contracts</td>
<td></td>
</tr>
<tr>
<td>Focus on costs and simplicity</td>
<td>High marketing expenditure</td>
<td>Adjust quality and product</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Procurement and supply chain strategy</th>
<th>Centralised</th>
<th>Centralised</th>
<th>Centralised</th>
<th>Centralised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralised</td>
<td>Strategic alliances</td>
<td>Centralised</td>
<td>Reduce out-of-pocket expenditures,</td>
<td>Decentralised</td>
</tr>
<tr>
<td>Single sourcing</td>
<td>Reduce lead time</td>
<td>Centralised</td>
<td>Cancel supplier contracts</td>
<td></td>
</tr>
<tr>
<td>Focus on supplier capabilities</td>
<td>Adjust quality and product</td>
<td>Centralised</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible purchasing and supply chain management</th>
<th>Is considered but often limited</th>
<th>High and proactive RPSM strategies</th>
<th>High and proactive RPSM strategies</th>
<th>High and proactive RPSM strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrelevant and receive very limited attention</td>
<td>Focus is on tangible investments</td>
<td>Response to societal expectations</td>
<td>Intangible differentiation</td>
<td>Neglected</td>
</tr>
<tr>
<td>Focus is on bottom line accounting and surviving</td>
<td>Some have reactive RPSM strategies</td>
<td>Intangible differentiation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8.3. **Methodology**

As a way of triangulating results and of offering a comprehensive analysis of the role of ILC in shaping RPSM engagement, this research makes use of two different empirical approaches to assess the above hypotheses. The first approach makes use of a cluster analysis to develop a typology of ILC. In so doing, it seeks to cluster industry-specific factors (munificence and dynamism\(^{14}\)), and supply chain factors (supplier development and the importance of the purchasing and supply function) with firms’ RPSM performance, and assesses whether such practices are associated with the characteristics of a mature industry. The second approach makes use of secondary data, which group firms into different ILC stages based on the average growth rate of sales over a four-year period. With this approach the author also controls for the development of suppliers to examine whether RPSM is a direct function of ILC or whether it is due to changes in the supply “philosophy”.

**Sample and data**

During the first stage of this research, which deploys a cluster analysis approach, the evidence presented here is based on the entire sample. As such, the sample at this stage of the empirical analysis consisted of 178 firms, and drew from data on 340 different buyer-supplier relationships.

For the second stage, after omitting observations that had missing independent variables, the sample consisted of observations on 313 buyer-supplier relationships. The sample was drawn from 75 industries at the 4-digit SIC code level. This includes industries in agriculture, construction, energy and utilities, manufacturing, food and drink, retail and wholesale, publishing, transport, communications, leisure and recreational, and waste management. The sample however did not include observations from the finance and banking sector, for reasons which will be explained in the following section.

\(^{14}\) The concepts of munificence and dynamism will be further explored in chapter 12, p. 271-274.
Stage one: Cluster analysis

Figure 20, based on the hypotheses presented above, suggests that as an industry progresses through the life cycle, it should be possible to observe different levels of RPSM engagement.

Figure 20 - Industry, Supply and RPSM Characteristics over the ILC

<table>
<thead>
<tr>
<th>ILC STAGES</th>
<th>Munificence: The capacity of the environment to sustain its own growth</th>
<th>Growth</th>
<th>Mature</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRY SPECIFIC FACTORS</td>
<td>Munificence: The capacity of the environment to sustain its own growth</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>INDUSTRY SPECIFIC FACTORS</td>
<td>Dynamism: Technological changes and uncertainty</td>
<td>High</td>
<td>Low/Medium</td>
<td>High</td>
</tr>
<tr>
<td>PURCHASING AND SUPPLY CHAIN PROCESSES</td>
<td>Supplier development efforts</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>PURCHASING AND SUPPLY CHAIN PROCESSES</td>
<td>Purchasing and supply chain importance</td>
<td>Low</td>
<td>Medium/High</td>
<td>Low</td>
</tr>
<tr>
<td>RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT</td>
<td>Socially responsible purchasing and supply management engagement</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT</td>
<td>Environmentally responsible purchasing and supply management engagement</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

As summarised in figure 20, at the early stages of the ILC there is significant capacity on the part of the environment to sustain its own growth, but there is also considerable uncertainty. As the industry declines, there may again be a great deal of uncertainty but also heavy investment in technological changes in order to revive the industry. Furthermore, the purchasing and supply chain function changes during the ILC, from one where such activities are considered as decentralised functions in the growth stage, to one where these are paramount to the success of the firm in the maturity stages. Finally, if the arguments of the previous section hold, then it should also be anticipated that as the ILC matures, a firm’s strategic use of RPSM increases, but that may also occur because of development of the suppliers.
As a first step in assessing the validity of the hypotheses, a cluster analysis is conducted to see if the aforementioned variables can be clustered into an ILC typology which incorporates RPSM. Details relating to the construction of these variables: munificence, dynamism, purchasing importance and supplier development, including factor analysis and reliability scale (Cronbach alpha) can be found in table 21.

Table 21 - Factor and Reliability Analysis of ILC Characteristics

<table>
<thead>
<tr>
<th>Munificence - Adapted from Stuart (1993, 1997)</th>
<th>Cronbach alpha: 0.722 Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>The business climate in our industry is very competitive</td>
<td>0.835</td>
</tr>
<tr>
<td>Winning in the market place is a very tough battle</td>
<td>0.885</td>
</tr>
<tr>
<td>What used to be good enough to succeed in the marketplace is no longer sufficient for success</td>
<td>0.687</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dynamism - Adapted from Paulraj and Chen (2007)</th>
<th>Cronbach alpha: 0.685 Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your industry is characterized by rapidly changing technology</td>
<td>0.882</td>
</tr>
<tr>
<td>It would be difficult for you to remain competitive if you don't keep up with changes in technology</td>
<td>0.861</td>
</tr>
<tr>
<td>The rate of process obsolescence is low</td>
<td>0.588</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purchasing status - Adapted from Cousins et al. (2006)</th>
<th>Cronbach alpha: 0.820 Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this company, purchasing is considered a vital part of our corporate strategy</td>
<td>0.884</td>
</tr>
<tr>
<td>Purchasing views are considered important in most top managers' eyes</td>
<td>0.873</td>
</tr>
<tr>
<td>Top management is supportive of our efforts to improve the purchasing department</td>
<td>0.819</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplier development efforts - Adapted from Krause et al. (2000) and Lee and Humphreys (2007)</th>
<th>Cronbach alpha: 0.747 Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>We use established guidelines and procedures when evaluating supplier performance</td>
<td>0.823</td>
</tr>
<tr>
<td>We perform site visits to supplier premises to help improve their performance</td>
<td>0.846</td>
</tr>
<tr>
<td>We invite supplier personnel to our premises to increase awareness of how their product is used</td>
<td>0.775</td>
</tr>
</tbody>
</table>

**Stage two: Regression analysis**

**Independent variable**

**Industry life cycle.** There has been a range of methods for measuring the ILC, as also acknowledged by Chang and Chang (2003). Agarwal et al. (2002) and Klepper (1997) assess the ILC by considering the number of firms in the industry, along with entry and exits to and
from the industry. However, this approach requires several decades of statistics on the number of entry and exits into the industry, and both of the above studies considers this over nearly a century. Nevertheless, this method is not appropriate in the context of UK data, due to significant changes in the UK SIC code classification and the relatively limited availability of longitudinal data on firm entry and exit in the industry. Therefore, the author adopts an approach from the product life cycle literature (Anderson and Zeithaml, 1984; Thietart and Vivas, 1984), and categorises industries into three stages by considering the aggregate sales growth rate over a four-year period. Data for industry growth were obtained from the Annual Business Inquiry database, which is a part of the national statistics office in the UK. The average annual growth rate was subsequently calculated and a set of binary variables was created to capture growth, mature and declining industries. Growth stage were categorised as industries with a growth rate greater than 4.5%. Mature industries were categorised as industries with a growth rate between 0 and 4.5%, and finally declining industries were categorised as industries with a negative growth rate. This relationship between ILC stage and market growth is illustrated in figure 21 (from Thietart and Vivas, 1984)\textsuperscript{15}.

\textbf{Figure 21 - Classification of Industry Life Cycle Stages}

\begin{tabular}{|c|c|c|c|}
\hline
\textbf{MARKET GROWTH} & -10 & 0 & +4.5 & +35 \\
\hline
\textbf{INDUSTRY LIFE CYCLE} & & & & \\
\hline
\multicolumn{4}{|c|}{\it Growth industries} \\
\hline
\multicolumn{4}{|c|}{\it Maturity industries} \\
\hline
\multicolumn{4}{|c|}{\it Declining industries} \\
\hline
\end{tabular}

\textsuperscript{15}Similar to Thietart and Viva (1984) it is not believed that this study includes any firms in the introduction stage of the ILC.
Control variables include those discussed in chapter 7. Similarly, the construct for supply management “philosophy”, was measured by “supplier development” as also discussed in chapter 7.

8.3.1. Econometric approach

The initial intentions with this piece of research were to consider how different stages of the ILC were associated with different responses towards RPSM practices, by first considering this relationship over the entire sample whilst controlling for the set of theoretically derived industry-specific variables. Subsequently, the aim was to run the same regressions on two sub-samples for the B2C and B2B. Nevertheless, a number of problems became apparent from the preliminary screening of the data. In particular two problems warranted further attention to ensure the reliability and validity of the regression analysis, which were those of unequal sample sizes and multicollinearity. The majority of firms that were categorised as being in the growth stage of the ILC were in the B2B sector, with 101 observations in the B2B and 55 observations in the B2C sector for the growth stage. In contrast the vast majority of firms that were categorised as being in a mature industry were also objects of the B2C sector, with 64 observations in the B2C and only 23 observations in the B2B sector. A proportionally larger number of firms in the B2C sector were also at the decline stage compared to the B2B sector, with 48 and 22 observations, respectively. Significant sample size errors therefore existed in the dataset, in particular as mature industries within the B2B sector were under-represented. If ignored, the statistical power of the regression analysis may be reduced, as the “power to detect the moderating effect depends upon the strength of the sample-based semi-partial correlations between the criterion variable [(ILC stages)] and the product term” and their representation in each sub-sample (Aguinis, 1995, p. 1148). Furthermore, because ILC stages, in particular the mature stage, are highly correlated with the dichotomous variable of B2C, creating a product term of the two predictor scores (MATURE x B2C) resulted in significant multicollinearity problems, which in turn are likely to cause spurious results where the regression coefficients are unstable, the error term enlarged and explanatory power reduced, thus leading to a type II error (Aguinis, 1995, p. 1149; Stone-Romero et al., 1994).
To overcome this problem the author created a matrix of categorical variables that to sought capture the characteristics of both ILC stages and target market (B2C/B2B). This approach limits the issue of multicollinearity problems, while also minimising the issue of unequal sample size, since every category is included in the regression and thus controlled for. Table 22 illustrates the creation of six different, and uncorrelated, categorical variables.

Table 22 - Categorical Variables of ILC Stages and B2C/B2B sectors

<table>
<thead>
<tr>
<th>Sector/ILC stage</th>
<th>GROWTH</th>
<th>MATURE</th>
<th>DECLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B2C</strong></td>
<td>Firm in operating in a B2C sector and currently in a growth industry (n=55)</td>
<td>Firm in operating in a B2C sector and currently in a mature industry (n=64)</td>
<td>Firm in operating in a B2C sector and currently in a decline industry (n=48)</td>
</tr>
<tr>
<td>(n=167)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=146)</td>
<td><strong>BENCHMARK</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.4. Results and analysis

As a starting point of the analysis this section will first focus on the cluster analysis that seeks to understand if the elements that are associated with the different stages of the ILC can indeed be considered and loaded as different independent stages of the ILC.

The results of the cluster analysis are given below in table 23. Broadly speaking these results are in line with the characteristics outlined in figure 20 and with the hypotheses presented. As such, the cluster analysis generate three distinctive ILC stages and more importantly the nature
of these, are in accordance with the earlier literature and outline of ILC and its connection to both the purchasing function role and importance and the nature of firms engagement with RPSM practices. At the growth stage, competition is low and there is considerable capacity for the environment to sustain its own growth, but there are also very few technological changes, which is a contradiction of expectations. Nonetheless, in these highly munificent environments, it appears that purchasing and supply chain processes are relatively neglected. Similarly, at this stage, little engagement with RPSM takes place. In contrast, in the maturity stage the results suggest that there is some competition, and the capacity of the industry environment to sustain its own growth appears to be diminishing. At this stage, however, there are very few technological changes, and the purchasing function plays a significant role for the organisation. Furthermore, supply chain processes are well developed. As such the nature of these four characteristics are in line with the literature, as the results suggest that stable and mature markets are associated with a centralised purchasing function where the firm invests in developing suppliers. More importantly, it can also be observed that it is at this stage that RPSM is at the highest level. In the decline stage the industry environment changes and becomes more competitive and uncertain, and as such the purchasing and supply function, including RPSM engagement, seems to go back to the levels of growth industries, where such activities are neglected.
Table 23 - ILC Stages and RPSM: Cluster Analysis

<table>
<thead>
<tr>
<th>INDUSTRY SPECIFIC FACTORS</th>
<th>ILC STAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Munificence: The capacity of the environment to sustain its own growth</td>
<td>Growth</td>
</tr>
<tr>
<td>Dynamism: Technological changes and uncertainty</td>
<td>-1.460</td>
</tr>
<tr>
<td>Purchasing and supply chain importance</td>
<td>-0.904</td>
</tr>
<tr>
<td>Supplier development efforts</td>
<td>-0.392</td>
</tr>
<tr>
<td>Socially responsible purchasing and supply management engagement</td>
<td>-0.668</td>
</tr>
<tr>
<td>Environmentally responsible purchasing and supply management engagement</td>
<td>-0.534</td>
</tr>
</tbody>
</table>

These observations go some way to explain how the characteristics of the ILC influences RPSM, and they find support for hypotheses 1 and 2, but they do, however, not suggest that firms in declining industries engage more actively with RPSM, compared to the growth stage. It is however clear that stable industry environments, such as mature industries, foster not only a more centralised and strategic purpose of the purchasing and supply chain function, but it is also significantly associated with improved socially and environmentally responsible purchasing and supply chain practices.

Moving on to the second empirical approach, table 24 gives the mean standard deviation and Pearson's correlation figures for the variables used in this analysis.
Table 24 - Means, Standard Deviations and Inter-Correlations of Key Variables, Aggregated: N=313

| Mean   | Std. Deviation | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  |
|--------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Socially RPSM performance | 2.369 | .817 | .620 | * | | | | | | | | | | | | | | | | | | | | | | |
| 2. Environmentally RPSM performance | 2.369 | .817 | .620 | * | | | | | | | | | | | | | | | | | | | | | | |
| 3. Firm size | 8.911 | 2.152 | .167 | .138 | | | | | | | | | | | | | | | | | | | | | | |
| 4. B2C | .524 | .510 | .317 | .156 | .023 | | | | | | | | | | | | | | | | | | | | | | |
| 5. USA | .064 | .245 | .006 | .012 | .065 | .044 | | | | | | | | | | | | | | | | | | | | | | |
| 6. West Europe | .173 | .378 | .120 | .141 | .115 | .062 | .119 | | | | | | | | | | | | | | | | | | | | | | |
| 7. UK | .492 | .511 | .239 | .027 | .059 | .041 | .257 | .149 | | | | | | | | | | | | | | | | | | | | | | |
| 9. India | .045 | .267 | .043 | .206 | .024 | .047 | .057 | .099 | .203 | .078 | | | | | | | | | | | | | | | | | | | | |
| 10. South East Asia | .067 | .251 | .236 | .121 | .174 | .097 | .070 | .122 | .264 | .094 | .258 | | | | | | | | | | | | | | | | | | |
| 11. Others | .051 | .221 | .063 | .014 | .097 | .043 | .061 | .166 | .226 | .081 | .250 | .062 | | | | | | | | | | | | | | |
| 12. Service binary | .169 | .376 | .085 | .005 | .123 | .156 | .039 | .021 | .067 | .135 | .018 | .019 | .027 | | | | | | | | | | | | | | | |
| 13. Relationship length | 1.047 | .371 | .017 | .025 | .011 | .059 | .063 | .113 | .044 | .119 | .080 | .067 | .034 | .078 | | | | | | | | | | | | | | | |
| 15. Product importance | .042 | .945 | .162 | .087 | .292 | .106 | .057 | .188 | .256 | .085 | .061 | .081 | .166 | .176 | .355 | | | | | | | | | | | |
| 16. Power imbalance | -.023 | 1.272 | .032 | .092 | .157 | .059 | .110 | .262 | .263 | .099 | .169 | -.085 | .010 | .024 | -.056 | .316 | .254 | | | | | | | | | |
| 17. Socially impactful product | .063 | .376 | .035 | .020 | .141 | .026 | .016 | .107 | .167 | .031 | .065 | -.034 | -.076 | .043 | -.027 | -.233 | -.234 | .260 | | | | | | | |
| 18. Environmentally impactful product | .199 | .312 | .118 | .083 | .077 | .106 | .077 | .031 | .006 | .019 | -.026 | -.094 | .034 | -.021 | .088 | -.124 | -.010 | .072 | .195 | | | | | | | |
| 19. Socially impactful industry | .080 | .272 | .068 | .041 | .077 | .252 | .019 | .053 | .007 | -.067 | -.062 | -.068 | -.067 | -.010 | -.033 | -.049 | -.047 | -.089 | .049 | | | | | | | |
| 20. Environmentally impactful industry | -.150 | .358 | .122 | -.131 | .249 | -.019 | .036 | -.021 | .016 | -.032 | -.029 | -.041 | -.057 | .168 | -.118 | -.194 | -.169 | -.012 | -.165 | -.147 | -.124 | | | | | | |
| 21. Socially impactful product AND industry | .141 | .348 | .283 | -.015 | -.191 | .322 | -.196 | -.239 | -.104 | .125 | -.243 | -.039 | -.249 | .183 | -.030 | -.034 | .166 | -.104 | -.122 | -.141 | -.119 | -.170 | | | | | | |
| 22. Environmentally impactful product AND industry | -.112 | .316 | .111 | -.011 | -.020 | .007 | -.093 | .133 | -.045 | -.026 | -.119 | -.014 | -.082 | -.025 | .079 | -.017 | .126 | -.013 | -.197 | -.124 | -.105 | -.149 | -.144 | | | | | | |
| 23. ILC INTRO | -.058 | .551 | -.196 | -.146 | .050 | .262 | -.051 | -.015 | .195 | -.102 | .032 | -.089 | -.144 | .078 | .034 | -.045 | .115 | .001 | .117 | .104 | -.136 | -.046 | -.356 | -.115 | | | | | | |
| 24. ILC MATURE | .279 | .449 | .216 | .144 | .088 | .251 | .043 | .056 | -.007 | -.010 | -.021 | .005 | -.112 | .081 | -.072 | -.081 | .077 | -.059 | -.036 | -.056 | .238 | -.081 | .115 | -.016 | -.018 | | | | | | |
| 25. ILC DECLINE | .224 | .417 | .007 | -.022 | .283 | .164 | .017 | -.042 | -.123 | .133 | -.065 | .101 | .049 | -.161 | .037 | -.012 | .097 | -.011 | -.134 | -.064 | -.045 | -.054 | .224 | .199 | .535 | -.335 | | | | | |
| 26. R&D expenditure | .034 | .380 | .312 | .221 | .077 | .164 | -.084 | .023 | .054 | .174 | -.116 | -.016 | .061 | -.162 | .035 | .061 | .106 | .007 | -.072 | .020 | .112 | -.055 | .197 | -.069 | .066 | .010 | .066 | | | |

* Correlation is significant at the 0.01 level (2-tailed).
** Correlation is significant at the 0.05 level (2-tailed).
†Correlation is significant at the 0.05 level (2-tailed).
Based on secondary data; N=313
Considering the correlations given in table 24, it is evident that a number of elements are associated with socially and environmentally RPSM. Amongst others, it can be observed that firms’ size is positively correlated with RPSM. Supplier location is also strongly correlated with RPSM, in particular for social issues, and it is therefore consistent with previous discussions about how social responsibilities’ seem to be moving from West to East (Krueger, 2008). Product/supply importance is also positively associated with socially RPSM practices, whereas power imbalance (buyer power) is positively correlated with environmentally RPSM.

ILC stages are also correlated with RPSM. The correlation between the ILC stages, which are based on the four-year average sales growth show strong negative correlation between the growth stage and RPSM, whereas the maturity stage is positively associated with RPSM. In terms of magnitude, the two different approaches to capturing ILC and its effect on RPSM is also similar, and it can be observed that ILC has a relatively greater influence on socially RPSM practices, compared to environmentally RPSM practices.

Supplier development efforts, the proxy for supply “philosophy” and firms’ strategic stances towards its supply chain function, are also positively correlated with both social and environmental purchasing and supply management practices.

A few further points are worth highlighting. First, the dummy variable for UK is highly correlated with the dummy variables for a number of other countries, which in turn causes multicollinearity issues for the following regression analysis, and hence was omitted for the analysis. The effect of the UK dummy variable is likely to be caused by the fact that the sample is skewed towards domestic (UK) purchases and supply transactions and accounts for nearly half of all transactions in the entire sample. Secondly, there is strong evidence to suggest that a firm that operate in the B2C sector are much more likely to engage in proactive RPSM practices. Firms that “operate in” and “procure from” socially sensitive industries are also more proactive in terms of their social efforts. In contrast, firms operating in environmentally impactful industries appear to neglect strongly their environmentally RPSM practices.
<table>
<thead>
<tr>
<th>Supplier development programmes</th>
<th>Social RPSM</th>
<th>Environmental RPSM</th>
<th>Social RPSM</th>
<th>Environmental RPSM</th>
<th>Social RPSM</th>
<th>Environmental RPSM</th>
<th>Social RPSM</th>
<th>Environmental RPSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier location</td>
<td>USA</td>
<td>(0.201)</td>
<td>(0.197)</td>
<td>0.116</td>
<td>0.359*</td>
<td>0.104</td>
<td>0.402**</td>
<td>0.145</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>(0.234)</td>
<td>(0.202)</td>
<td>0.062</td>
<td>0.346-</td>
<td>0.002</td>
<td>0.391*</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>(0.204)</td>
<td>(0.233)</td>
<td>0.346</td>
<td>0.007**</td>
<td>0.011</td>
<td>0.055</td>
<td>0.067</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>(0.234)</td>
<td>(0.223)</td>
<td>0.062</td>
<td>0.346-</td>
<td>0.002</td>
<td>0.391*</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>(0.204)</td>
<td>(0.233)</td>
<td>0.346</td>
<td>0.007**</td>
<td>0.011</td>
<td>0.055</td>
<td>0.067</td>
</tr>
<tr>
<td>Transaction characteristics</td>
<td>Relationship length</td>
<td>0.044</td>
<td>(0.048)</td>
<td>0.055</td>
<td>0.007</td>
<td>0.057</td>
<td>0.011</td>
<td>0.050</td>
</tr>
<tr>
<td></td>
<td>Service binary variable</td>
<td>0.060</td>
<td>(0.046)</td>
<td>0.049</td>
<td>0.046</td>
<td>0.050</td>
<td>0.047</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>Product complexity</td>
<td>0.055</td>
<td>(0.049)</td>
<td>0.054</td>
<td>0.050</td>
<td>0.054</td>
<td>0.050</td>
<td>0.053</td>
</tr>
<tr>
<td></td>
<td>Product importance</td>
<td>0.055</td>
<td>(0.049)</td>
<td>0.054</td>
<td>0.050</td>
<td>0.054</td>
<td>0.050</td>
<td>0.053</td>
</tr>
<tr>
<td></td>
<td>Power imbalance</td>
<td>0.108</td>
<td>(0.041)</td>
<td>0.041</td>
<td>0.038</td>
<td>0.041</td>
<td>0.038</td>
<td>0.040</td>
</tr>
<tr>
<td>Industry and product</td>
<td>B2C sector</td>
<td>0.342**</td>
<td>0.215**</td>
<td>0.340**</td>
<td>0.154*</td>
<td>(0.107)</td>
<td>0.069</td>
<td>0.110</td>
</tr>
<tr>
<td></td>
<td>Environmentally impactful product</td>
<td>0.211</td>
<td>(0.183)</td>
<td>0.157</td>
<td>0.142</td>
<td>0.167</td>
<td>(0.185)</td>
<td>0.181</td>
</tr>
<tr>
<td></td>
<td>Socially impactful industries</td>
<td>0.178</td>
<td>(0.187)</td>
<td>0.107</td>
<td>0.148</td>
<td>0.040</td>
<td>(0.190)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally impactful industries</td>
<td>0.156</td>
<td>(0.156)</td>
<td>0.105</td>
<td>0.045</td>
<td>0.020</td>
<td>(0.146)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry life cycle</td>
<td>0.169</td>
<td>(0.120)</td>
<td>0.251**</td>
<td>(0.110)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction (B2C)</td>
<td>0.352**</td>
<td>0.206</td>
<td>0.358**</td>
<td>0.239</td>
<td>(0.154)</td>
<td>(0.125)</td>
<td>0.151</td>
</tr>
<tr>
<td></td>
<td>Maturity (B2C)</td>
<td>0.451**</td>
<td>0.387**</td>
<td>0.469**</td>
<td>0.361**</td>
<td>(0.154)</td>
<td>(0.125)</td>
<td>0.151</td>
</tr>
<tr>
<td></td>
<td>Decline (B2C)</td>
<td>0.320</td>
<td>(0.197)</td>
<td>0.104</td>
<td>0.269</td>
<td>0.089</td>
<td>(0.186)</td>
<td>(0.193)</td>
</tr>
<tr>
<td>Supply management &quot;philosophy&quot;</td>
<td>Supplier development programmes</td>
<td>0.194***</td>
<td>0.129***</td>
<td>(0.049)</td>
<td>(0.046)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared: 0.382, Adjusted R-squared: 0.348

***p<0.01  **p<0.05  *p<0.10
The results of table 25 capture how different stages of the ILC influence firms’ RPSM activities, based on secondary data and ILC stages that are defined according to industry growth of sales. In model 1 it can be observed that when firms source from China or South East Asia they actively engage in social initiatives, and the country dummy variable for socially RPSM accounts for nearly half of the variation in socially RPSM. In contrast, for environmentally RPSM (model 2), supplier location account only account for around 5% of the variation in environmentally RPSM performance. It is also clear that firms purchasing from India vastly neglect their environmental responsibilities. Transaction-specific characteristics are also important in shaping RPSM. In particular product importance and buyers’ relative power over suppliers seem to facilitate RPSM. Finally, industry characteristics also seem to play a significant role in shaping RPSM. More specifically, firms that both operate in a socially sensitive industry and procure products that are socially sensitive are relatively proactive in terms of their socially RPSM practices. Firms that operate in environmentally sensitive industries however strongly neglect their environmentally RPSM practices. Finally, the results of models 1 and 2 suggest that firms that predominantly serve a B2C segment are much more likely to engage in both socially and environmentally responsible purchasing and supply management practices.

Models 3 and 4 use binary variables to indicate how firms’ RPSM practices differ in the mature and declining stage, compared to the introduction stage. The results of models 3 and 4 however suggest that ILC has limited influence on socially RPSM practices, but there is evidence to suggest that mature industries engage more actively with environmentally RPSM. Nonetheless, as noted earlier, the distribution of B2C firms to a large extent overlap with the distribution of mature industries, which is likely to create a serious issue of multicollinearity. Indeed, the inter-correlation figures given in table 24 suggest that multicollinearity may be an issue, which in turn can result in a type II error, where the regression results yield a false negative. To overcome this problem an alternative solution was offered in the methodology section. Models 5 and 6, therefore seek to solve the problem of multicollinearity by using categorical variables simultaneously to measure the stage of the firm’s ILC and the primary target segment of the firm. The regression results of models 5 and 6, show that firms operating in mature industries within the B2C sector are highly proactive in terms of both their socially
and environmentally RPSM practices, at the 1 percent significance level. At the 5 percent significance level, the results also suggest that B2C firms operating in the growth stage are relatively more proactive in terms of their socially RPSM, compared to firms in the B2B sector regardless of their ILC stage. In terms of environmentally RPSM the results confirm the figures of model 4 and hence it is evident that mature industries engage more proactively in environmental practices, but only in the B2C sector. The final set of regressions presented within this chapter are given by models 7 and 8, which incorporate a variable to capture firms’ supply “philosophy”, as measured by supplier development efforts. In terms of both socially and environmentally RPSM, the results show that supplier development is a crucial element to improve the socially and environmentally responsible performance of the supplier relationship. Nonetheless, there is not a considerable reduction in the significance or magnitude of the binary variables that simultaneously captures the stage of the firms ILC and the primary target segment of the firm, suggesting that ILC does not influence RPSM through its effect on supplier development efforts. The final set of results also suggest that in terms of socially RPSM, even B2B firms engage more proactively at the maturity stage at the 10 percent significance level.

In summary, the results suggest that ILC plays a significant role in shaping RPSM. Controlling for supply development efforts, ILC is one of the strongest factors in influencing socially RPSM. However, in terms of environmentally RPSM, ILC appears to play a comparatively smaller role in influencing these practices. The evidence suggests that B2C firms operating in a mature industry engage in greater levels of RPSM compared to firms at both the growth and declining stage.

8.5. Discussion and conclusion

The results of the cluster analysis give strong support for hypotheses 1 and 2 and partial support for hypothesis 3. As such, it is clear that mature and stable markets are not only associated with a greater strategic role of the purchasing and supply chain function, but also with considerably greater RPSM efforts. Similarly, the regression analysis indicated that ILC in particular plays a significant role in shaping RPSM in the B2C market.
It is however unclear the extent to which the relationship between ILC and RPSM is mediated by the development of suppliers. The cluster analysis suggests that the associated characteristics of a mature and stable market are the development and importance of the purchasing and supply chain function, and both are in turn associated with RPSM. In contrast, the regression analysis suggests that ILC predominantly influences RPSM practices, due to changes in the strategic behaviour of the firm, as this relationship does not appear to be mediated by the strategic development of suppliers, as captured by “supplier development”. As such, the key findings of this chapter can be summarised as:

- Responsible purchasing and supply management practices are associated with mature and stable markets.

- Mature and stable markets are associated with a greater strategic role on the part of the purchasing and supply chain function, which in turn is linked to relatively greater engagement with responsible purchasing and supply management.

- The industry life cycle has, in particular, a strong role in shaping responsible purchasing and supply management practices in the B2C sector.

- The influence of the industry life cycle on responsible purchasing and supply management is, although mixed results were found, likely to be due to its influence on both business strategy and the strategic function of the purchasing and supply chain, which develop over the life cycle.

- Both growth and declining industries appear to neglect their responsible purchasing and supply chain management practices.

Given these findings this research has underlined the importance of industry-specific characteristics, such as the industry growth rate and its ILC stage, when considering RPSM practices. This research therefore highlights a significant implication for the interpretation of
both past and future research in the field of RPSM. Given the results presented herein, academics and practitioners alike should carefully interpret research that has been conducted in a single industry, as these findings and recommendations may not be used to generalise for other industries and sectors. Future research therefore needs to consider, or at least acknowledge, the impact that industry characteristics have on firms’ responsible purchasing and supply management practices. The findings of this research should therefore be treated as a foundation for a discussion on how industry influences RPSM, and further research is needed to consider fully the industry environment’s role on RPSM, as this research is relatively simple in its formulation of industry environment, and it may be that not all industries follow the tradition bell-shaped growth curve.

As acknowledged, the strategic CSR literature has argued that industry environment and life cycle influence a firm’s strategic priority and its propensity to use CSR as a differentiation technique. Based on this literature, it can be argued that the findings of this particular study are due to the impact that ILC has on a firm’s business strategy, but also the ILCs impact on supply management “philosophy”. Nevertheless, what has not been considered, partly because of the existing literature, is the impact that ILC stages have on a firm’s financial resources in terms of organisational slack, which is another important factor in shaping socially and environmentally responsible practices (Campbell, 2007). Given the constructs of ILC, which have largely been based on the industry’s level of munificence (sustained growth), it is possible that ILC influences a firm’s business strategy but also its financial resource, which subsequently influences its RPSM practices. Although the strategic management literature acknowledges the relationship between munificent and financial resources, there has been a greater focus in the strategic CSR literatures on the link between industry environment and business strategy. Further research is therefore needed to understand if RPSM is indeed a function of a firm’s business strategy, or of a firm’s financial resources, both of which are arguably influenced by the firm’s ILC stage.

In conclusion, this research has provided one of the first assessments on how industry characteristics influence responsible purchasing and supply management practices. It also challenges some of the normative statements proposed in the strategic CSR and supply chain
literature, by examining the extent to which the purchasing and supply function, along with RPSM practices, are developed across the industry life cycle. Finally, it provides guidance to decision-makers inasmuch as it identifies certain characteristics of the industry environment and the firm which are associated with either lower or greater engagement with RPSM.

Reflecting back to the conceptual framework of chapter 4, this research has found some support for proposition 1a. Nonetheless, it is unclear, due to the limitation of this research, as to the extent to which the research truly supports proposition 1a rather than proposition 3a. However, strong support is found for proposition 4, with the industry environments effect on RPSM being moderated by the target segment.
CHAPTER 9
9. FINANCIAL RESOURCES (ORGANISATIONAL SLACK) AND RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT

9.1. Introduction

As noted earlier, the resource based view (RBV) of the firm has played a significant role in the strategic management literature. Arguably, one of the most significant resources for the successful implementation of RPSM are financial resources, as the perceived costs of implementing such initiatives have been shown to be one of its main barriers (Bowen et al., 2001; Min and Galle, 1997; Murphy and Poist, 1995; Walker et al., 2008; Welford and Frost, 2006). Using the theory of organisational slack (Bourgeois, 1981; Bourgeois and Singh, 1983), this study seeks to understand the role of financial resources in influencing RPSM engagement. With respect to the conceptual framework of chapter 4, this study therefore explicitly seeks to understand proposition 3b, albeit with a slight extension to the framework, as the model that will be presented within this study also examines whether financial resources are influencing supplier development efforts. Given this, this research sets out to answer the following questions: “to what extent does a firm’s financial resources, in terms of organisational slack, influence RPSM?”; and “in what ways do financial resources influence RPSM and under what circumstances are financial resources likely to play a significant role?”

The structure of this chapter is as follows: the theory of organisational slack will first be reviewed briefly, and some of the key aspects of both it and its relationship to strategies of innovation and CSR performance will be considered. Following this, the existing CSR and RPSM literature will be reviewed, in order to propose hypotheses about the relationship between financial resources and RPSM. Through regression analysis the validity of these hypotheses will be examined. This will be followed by a discussion section, which will highlight the implications of this research and possibilities for further research.
9.2. Theory and hypothesis development

In chapter 4 it was noted how financial resources have been suggested to be directly influenced by the industry environment (Dess and Beard, 1984), and how many authors have argued that the only reason why socially and environmentally responsible practices are influenced by the industry environment is due to the effect that the industry environment has on a firm’s financial resources (Campbell, 2007; Sethi and Sama, 1998).

Before addressing the conceptual relationship between financial resources and RPSM, it is worth briefly reviewing the concept of organisational slack, which will be used as a measurement of the type and level of financial resources a firm may have.

According to the seminal work of Bourgeois (1981) slack has the potential to influence firms’ strategic behaviour, for example through investment in innovation. However, organisational slack also allows managers to avoid departmental conflicts through its role of facilitating investment into issues that are not central to a firm’s strategy (Bourgeois, 1981). Bourgeois (1981, p. 30) defined organisational slack as “…that cushion of actual or potential resources which allows an organisation to adapt successfully to internal pressures for adjustment or to external pressure for change in policy, as well as to initiate changes in strategy with respect to the external environment”. The traditional economic perspective of organisational efficiency is that slack ought to be zero, as this would suggest that all resources are being exploited and as such no resources are idle in the operation (Cyert and March, 1963). Nonetheless, other scholars (e.g. Thompson, 1967; Penrose, 1959) argue that the statement of zero slack resources is unrealistic, because firms need slack resources that enable them to “adjust to gross shifts in the external environment with minimum trauma” (Bourgeois, 1981, p. 31).

Organisational slack has been suggested to have two main functions (Bourgeois, 1981): first it is an operational or a work flow variable, which is related to the internal maintenance of the organisation (see also Bowen, 2002); second it is a facilitator of the strategic behaviour of the firm. The first role of organisational slack suggests that sufficient financial resources are used for conflict resolution and that it allows discretionary spending and investment in “pet-
projects” (Cyert and March, 1963; Moch and Pondy, 1977; Bourgeois, 1981). The latter function of organisational slack is in line with the conceptual framework of chapter 4 and proposition 3c, where financial resources facilitate creative behaviour on the part of the firm, and can allow the firm to seek new strategies, by embarking on new products or entering new markets (Bourgeois, 1981).

9.2.1. Conceptual model

This study views firms’ RPSM engagement as being contingent on their financial resources, as measured by available, recoverable and potential slack. As such, the model offered in figure 22 is part of the larger conceptual framework developed earlier, and the argument here emphasises the direct and discretionary role of financial resources rather than their potential to influence the strategic behaviour of the firm. Following this strain of literature, this research will argue that RPSM is associated with investment in “pet-projects” and only undertaken when firms can afford to do so. This implies that firms with few financial resources neglect RPSM as it is not a priority for the success of the firm. In addition, this study will argue that RPSM may be moderated by the impact of financial resources on general supplier development activities.
The following two sections will further develop these arguments and propose a set of testable hypotheses which will be subject to hierarchical regression analysis.

9.2.2. **Financial resources and corporate social responsibility**

The allocation of scarce resources has developed into a complex issue in recent times, as firms’ performance is increasingly being measured using not only financial profitability ratios but also their ability to meet societal expectations (Waddock and Graves, 1997). In the context of Carroll’s (1979) hierarchy of CSR initiatives, investment in social and environmental initiatives in the supply chain is largely an ethical and discretionary activity. For example it can be argued that in global supply chains, where buyers outsource non-core competences to suppliers, it is the suppliers’ legal and ethical responsibility to ensure that the labour and working conditions are being met and that the firm (supplier) is operating within the national and industry laws. These legal and ethical responsibilities are, however, arguably not a part of the buyers’ responsibilities, once the contract(s) has been outsourced and if the supplier agrees to meet national legal, ethical, social and environmental standards. Nevertheless, it is at the
buying firms’ discretion to engage actively in CSR efforts in the global supply chain and to visit, monitor and develop suppliers to adhere to globally acceptable social and environmental standards, which are expected by the buying firms’ stakeholders. Given this discretionary view of firms’ RPSM engagement, it can be argued that discretionary resources, i.e. organisational slack, influence firms’ level of proactiveness with respect to their RPSM efforts. This is in line with the ideas of Cyert and March (1963) and McGuire et al. (1988), who argued that policies and expenditure in discretionary areas, such as CSR, are in particular sensitive to organisational slack. In addition, from an environmentally responsible perspective, Bowen (2002, p. 306) argues that excess resources can be used 1) to experiment and invest in environmental innovation and ‘green’ market segments, and 2) respond to pressure for environmental improvements.

The model proposed in figure 22 suggests that RPSM is contingent on firms’ financial resources. However, this alone suggests that RPSM is not a fully strategic issue for the firm, because if RPSM is important for the success of the firm, it is likely that such activities would not be contingent on its financial state. Although the author acknowledges that organisational slack has an impact on a firm’s business strategy and its innovation propensity, the CSR literature strongly suggests that organisational slack directly influences RPSM due to discretionary motives, rather than through its impact on business strategy and subsequent RPSM initiatives. Hence:

**Hypothesis 1:** Financial resources (organisational slack) positively and directly influence a firm’s responsible purchasing and supply management performance.

Given that much of the CSR literature has highlighted the need for liquidity, i.e. cash, to implement social and environmental initiative, it is suspected that RPSM practices, being often a less visible part of a firm’s CSR programme, are in particular vulnerable to current and immediate slack. Therefore:
Hypothesis 2: The relationship strength between financial resources and responsible purchasing and supply management performance depends on the accessibility of the resources and it thus ranges from strong (available resources), through moderate (recoverable resources) to weak (potential resources).

9.2.3. Financial resources and supply chain management

Although research into the relationship between organisational slack, operational management and supply chain management is limited, a number of scholars have, at least conceptually, acknowledged the importance of resources, in particular financial, in developing specific supply chain strategies. Krause (1999) argues that a firm’s overall success is dependent on its success in developing suppliers, such that they are able to meet the firm’s short- and long-term needs. In order to develop suppliers, top management must however invest time, personnel and financial resources into the buyer-supplier relationship. For example, information-sharing and information systems have been shown to improve supply chain flexibility; however small to medium enterprises often lack the financial resources to implement such technologies (Sahin and Robinson, 2005). Supply chain initiatives, such as Just-In-Time, have also been suggested to improve significantly the competitiveness of the firm. However, such programmes are dependent on top management and the financial resources of the firm (Kaynak and Pagan, 2003). Similarly, Álvarez-Gil et al. (2007) argue that organisational slack, in terms of financial resources, labour, time, material and machinery, is important for the implementation of reverse logistic processes. Nevertheless, they only found weak support for this hypothesis in their study of 158 Spanish firms in the automobile industry. The only significant form of slack that seemed to influence reverse logistics practices was net profit. Wagner (2006) however found that both human and capital resources were positively related to supplier development.
Reflecting this discussion that financial resources may directly influence firms’ propensity to develop their suppliers (Cannon and Homburg, 2001; Helper and Kiehl, 2004), and RPSM may be a part of such investments, it is hypothesised that:

*Hypothesis 3: Financial resources have an indirect, but positive, effect on responsible purchasing and supply management performance by influencing investment into the strategic development of suppliers.*

9.2.4. **Target market**

Firms in B2C markets have, arguably, an added incentive to engage in strategic RPSM, given that these firms in particular have been subject to scrutiny in the past (Phillips and Caldwell, 2005), and because such practices may help create a better brand image and signal the product quality and trustworthiness of the firm (McWilliams and Siegel, 2001), or reach new consumers (Mohr et al., 2001). Moreover, firms in B2C markets arguably also have a greater understanding of branding and positioning strategy compared to firms in B2B markets, and utilising RPSM practices to enhance corporate reputation may therefore be of strategic interest to firms in B2C, whereas such activities are seen as discretionary activities to B2B market firms (Inskip, 2004). Therefore:

*Hypothesis 4: Responsible purchasing and supply management activities of firms operating in the B2B market are in particular contingent on financial resources, whereas such activities are shaped to a lesser extent by the financial resources in the B2C sector.*
9.3. **Methodology**

9.3.1. **Sample and data**

After omitting observations that had missing independent variables, the sample consisted of 165 firms and 320 buyer-supplier relationships. This sample, among others, included firms in the following industries: agriculture, construction, energy and utilities, finance and banking, manufacturing, food and drink, retail and wholesale, publishing, transport, communications, leisure and recreational, and waste management.

9.3.2. **Measurements**

Independent variables

*Organisational slack.* As mentioned, a number of studies have considered the corporate social-financial performance relationship. However, there is a range of discrepancies between their measurements in so doing. For example, some studies consider slack to be equal to financial performance (e.g. McGuire et al., 1988; Waddock and Graves, 1997), whereas others measure slack according to the idea of Bourgeois (e.g. Seifert et al., 2004). For this research it was decided to use the original ideas of organisational slack by Bourgeois (1981) and Bourgeois and Singh (1983), and therefore organisational slack is considered to be a function of available financial slack, recoverable financial slack and potential financial slack. Nevertheless, even Bourgeois and Singh’s (1983) connotation of organisational slack has been measured differently in the literature, and rarely are the original measurements of either Bourgeois (1981) or Bourgeois and Singh (1983) used; rather, simplified proximities have been used in the existing literature.

In general, researchers have taken three different approaches when measuring organisational slack (see also Bowen, 2001). One option is to design a questionnaire that captures the organisational slack within the sub-unit of the organisation, similar to the approach of Nohria and Gulati (1996). Alternatively, researchers can follow the approach of Bourgeois and Singh...
(1983) and Seifert et al. (2004) and rely on secondary financial data to capture slack, which has been found to be the most common way of measuring slack (Daniel et al., 2004). Finally, researchers can seek to capture organisational slack qualitatively through semi-structured questionnaires, such as Bowen (2002). For the purpose of this study the approach of Bourgeois and Singh (1983) and Seifert et al. (2004) is followed.

The three types of slack; available, recoverable and potential, are commonly captured through, respectively, excess liquidity, overhead expenditures, and borrowing capacity (see Daniel et al., 2004). Based on a meta-analysis by Daniel et al., (2004) which examines organisational slack and financial performance, this study uses the most frequently applied financial measurements for available, recoverable and potential slack, which are, respectively, the current ratio, overhead and general expenditure to total sales, and debt-to-equity. The data for these financial ratios were obtained from the FAME database. As with Álvarez-Gil et al.’s (2007) study it is assumed all of these measurements will have a positive effect on RPSM practices, except for the debt-to-equity ratio, for which a negative relationship is expected. Similarly to Álvarez-Gil et al., (2007), this study uses data based on a two-year average prior to the moment when the survey took place, that is 2006-2007. Using organisational slack averages provides “a robust view that avoids spurious effects and data fluctuations commonly observed in cross-sectional or lag studies” (Balkin et al., 2000, Tabachnick and Fidell, 1996; cited in Álvarez-Gil et al., 2007, p.468).

There were however some significant outliers in the data obtained. In particular, they existed in the potential slack variable, which were measured as the debt-to-equity ratio. As these outliers did not appear to have any idiosyncratic patterns, such as being particular for the banking and finance industry, they were removed based on the Grubbs test for outliers. This test first involves standardising the organisational slack variables (z-scores) and subsequently removing scores that fall beyond the Grubbs critical value. The test detects outliers one at a time. Once the outlier has been removed from the sample, the remaining variables are then standardised once again to assess whether there are further outliers. This test is iterated until none of the standardised scores falls beyond the Grubbs critical value range.
Control variables include those discussed in chapter 7. Similarly, the construct for supply management “philosophy”, was measured by ‘supplier development’ as also discussed in the methodology section.

9.4. Results and analysis

Before discussing the regression results, this section will start with a brief overview of the generally observable relationship between organisational slack and firms’ RPSM practices, by considering the correlation figures of table 26.
### Table 26 - Means, Standard Deviations and Inter-Correlations of Key Variables, Aggregated

| Mean | Std. Deviation | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| 1    | Socially RPSM performance | 2.258 | 1.014 | 1 |
| 2    | Environmentally RPSM performance | 2.404 | .819 | .015 | 1 |
| 3    | Firm size | 8.928 | 2.052 | .197 | .177 | .016 | 1 |
| 4    | BDI binary | .522 | .550 | .295 | .200 | .016 | .061 | 1 |
| 5    | USA | .063 | .253 | .016 | .014 | .062 | .061 | 1 |
| 6    | WestEurope | .172 | .378 | .119 | .013 | .120 | .061 | .012 | 1 |
| 7    | UK | .503 | .581 | .243 | .027 | .025 | .050 | .273 | .458 | 1 |
| 8    | China | .163 | .265 | .052 | .015 | .057 | .090 | .154 | .341 | .011 | 1 |
| 9    | India | .047 | .212 | .009 | .008 | .055 | .060 | .101 | .232 | .075 | .071 | 1 |
| 10   | South East Asia | .063 | .242 | .235 | .109 | .150 | .116 | .070 | .118 | .260 | .098 | .057 | .016 | 1 |
| 11   | Others | .044 | .205 | .032 | .036 | .101 | .052 | .058 | .097 | .215 | .073 | .047 | .065 | 1 |
| 12   | Service binary | .181 | .386 | .037 | .057 | .115 | .167 | .065 | .064 | .034 | .133 | .068 | .021 | .061 | 1 |
| 13   | Relationship length | 1.913 | .975 | .003 | .052 | .020 | .245 | .119 | .036 | .097 | .072 | .064 | .034 | .089 | .091 | 1 |
| 14   | Product complexity | .013 | .103 | .197 | .113 | .175 | .116 | .069 | .172 | .270 | .092 | .005 | .074 | .020 | .201 | .167 | .355 | 1 |
| 15   | Product importance | .003 | .126 | .042 | .144 | .156 | .087 | .115 | .052 | .251 | .093 | .143 | .079 | .004 | .019 | .003 | .315 | .250 | 1 |
| 16   | Power influence | .078 | .269 | .032 | .031 | .111 | .061 | .013 | .022 | .163 | .060 | .006 | .027 | .062 | .016 | .023 | .223 | .243 | .287 | 1 |
| 17   | Socially impactful product | 1.288 | .335 | .092 | .058 | .030 | .031 | .009 | .024 | .007 | .057 | .007 | .003 | .069 | .036 | .014 | .042 | .142 | .036 | .064 | .112 | 1 |
| 18   | Environmentally impactful product | .079 | .269 | .062 | .057 | .057 | .235 | .033 | .053 | .015 | .000 | .009 | .069 | .062 | .010 | .045 | .031 | .017 | .056 | .050 | .045 | .039 | 1 |
| 19   | Socially impactful industry | .141 | .346 | .124 | .115 | .251 | .027 | .027 | .032 | .033 | .006 | .049 | .036 | .030 | .045 | .105 | .097 | .207 | .160 | .016 | .117 | .155 | .118 | 1 |
| 21   | Socially impactful product AND industry | .109 | .313 | .111 | .018 | .033 | .015 | .005 | .132 | .052 | .020 | .112 | .098 | .075 | .035 | .095 | .016 | .143 | .018 | .162 | .134 | .102 | .142 | .142 | 1 |
| 22   | Environmentally impactful product AND industry | 1.368 | .572 | .095 | .093 | .086 | .204 | .005 | .057 | .010 | .056 | .060 | .083 | .121 | .004 | .043 | .003 | .009 | .060 | .066 | .055 | .023 | .003 | .046 | .020 | 1 |
| 23   | Available Slack | .403 | .377 | .131 | .030 | .003 | .041 | .020 | .013 | .134 | .061 | .020 | .049 | .109 | .014 | .053 | .021 | .070 | .078 | .082 | .032 | .069 | .130 | .104 | .058 | 1 |
| 24   | Recoverable Slack | .202 | .183 | .285 | .225 | .004 | .085 | .018 | .024 | .044 | .114 | .236 | .031 | .056 | .020 | .058 | .010 | .080 | .049 | .066 | .038 | .038 | .005 | .066 | .125 | .265 | .094 | 1 |
| 25   | Potential Slack | .018 | .992 | .316 | .241 | .081 | .186 | .068 | .026 | .073 | .169 | .116 | .016 | .102 | .130 | .060 | .100 | .154 | .009 | .075 | .035 | .108 | .063 | .196 | .053 | .117 | .138 | .123 | 1 |

** Correlation is significant at the 0.01 level (2-tailed).  
* Correlation is significant at the 0.05 level (2-tailed).  
N=320
Table 26 gives the means, standard deviations and Pearson correlations figures for the entire sample. Similarly to the correlation results of the preceding chapter (chapter 8) a number of significant correlations exist between supplier location dummy variables, transaction-specific characteristics, industry dummy variables and socially and environmentally responsible purchasing and supply management performance.

Focusing, however, on the central elements that are specific to this chapter and hence considering the correlation figures between RPSM and the financial resource variables, it can be observed that at the aggregate level available slack is positively correlated with both socially and environmentally RPSM. However this relationship is only significant at the 10% significance level. In contrast, potential slack is negatively correlated to RPSM. This is in line with the researcher’s expectations, since the potential slack variable is a measurement of firms’ relative economic and financial responsibilities as measured by the debt-to-equity ratio. A strong and negative correlation between available and potential slack can also be observed. This suggests that both available and potential slack are two close proximities to measuring a firm’s financial resources and obligations, respectively. Finally, there is also evidence to suggest that both available and potential slack are affecting supplier development efforts.
Table 27 - Regression Analysis, Organisational Slack and RPSM, Aggregated

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
<td>Model 5</td>
<td>Model 6</td>
</tr>
<tr>
<td>Constant</td>
<td>0.387</td>
<td>1.503***</td>
<td>0.431</td>
<td>1.385***</td>
<td>0.574*</td>
<td>1.474***</td>
</tr>
<tr>
<td></td>
<td>(0.240)</td>
<td>(0.224)</td>
<td>(0.315)</td>
<td>(0.296)</td>
<td>(0.315)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.140***</td>
<td>0.089***</td>
<td>0.128***</td>
<td>0.093***</td>
<td>0.117***</td>
<td>0.086***</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.022)</td>
<td>(0.026)</td>
<td>(0.024)</td>
<td>(0.026)</td>
<td>(0.025)</td>
</tr>
<tr>
<td>Supplier location</td>
<td>USA</td>
<td>0.373*</td>
<td>0.150</td>
<td>0.381*</td>
<td>0.091</td>
<td>0.417**</td>
</tr>
<tr>
<td></td>
<td>(0.191)</td>
<td>(0.179)</td>
<td>(0.214)</td>
<td>(0.200)</td>
<td>(0.211)</td>
<td>(0.200)</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>West Europe</td>
<td>-0.138</td>
<td>0.096</td>
<td>-0.084</td>
<td>-0.012</td>
<td>-0.089</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.132)</td>
<td>(0.124)</td>
<td>(0.148)</td>
<td>(0.141)</td>
<td>(0.147)</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>0.251</td>
<td>-0.687***</td>
<td>0.196</td>
<td>-0.657***</td>
<td>0.272</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.224)</td>
<td>(0.211)</td>
<td>(0.244)</td>
<td>(0.232)</td>
<td>(0.246)</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>1.116***</td>
<td>0.139</td>
<td>1.098***</td>
<td>0.171</td>
<td>1.038**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.163)</td>
<td>(0.152)</td>
<td>(0.175)</td>
<td>(0.163)</td>
<td>(0.174)</td>
</tr>
<tr>
<td></td>
<td>South East Asia</td>
<td>1.195***</td>
<td>0.383***</td>
<td>1.217***</td>
<td>0.391*</td>
<td>1.258***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.198)</td>
<td>(0.186)</td>
<td>(0.222)</td>
<td>(0.210)</td>
<td>(0.219)</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>0.504**</td>
<td>0.160</td>
<td>0.144</td>
<td>-0.052</td>
<td>0.126</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.235)</td>
<td>(0.214)</td>
<td>(0.270)</td>
<td>(0.249)</td>
<td>(0.266)</td>
</tr>
<tr>
<td>Transaction characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>0.042</td>
<td>-0.006</td>
<td>0.042</td>
<td>0.009</td>
<td>0.036</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.046)</td>
<td>(0.054)</td>
<td>(0.051)</td>
<td>(0.053)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Service binary variable</td>
<td>0.037</td>
<td>0.023</td>
<td>0.032</td>
<td>0.018</td>
<td>0.038</td>
<td>0.018</td>
</tr>
<tr>
<td></td>
<td>(0.127)</td>
<td>(0.118)</td>
<td>(0.140)</td>
<td>(0.129)</td>
<td>(0.138)</td>
<td>(0.128)</td>
</tr>
<tr>
<td>Product complexity</td>
<td>0.036</td>
<td>0.074</td>
<td>0.024</td>
<td>0.076</td>
<td>0.005</td>
<td>0.065</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.050)</td>
<td>(0.058)</td>
<td>(0.054)</td>
<td>(0.058)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Product importance</td>
<td>0.146***</td>
<td>0.086*</td>
<td>0.143**</td>
<td>0.092*</td>
<td>0.139**</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
<td>(0.051)</td>
<td>(0.058)</td>
<td>(0.054)</td>
<td>(0.057)</td>
<td>(0.054)</td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.103***</td>
<td>0.108***</td>
<td>0.126***</td>
<td>0.128***</td>
<td>0.120**</td>
<td>0.124***</td>
</tr>
<tr>
<td></td>
<td>(0.040)</td>
<td>(0.037)</td>
<td>(0.044)</td>
<td>(0.041)</td>
<td>(0.043)</td>
<td>(0.041)</td>
</tr>
<tr>
<td>Industry and product</td>
<td>B2C sector</td>
<td>0.354***</td>
<td>0.283***</td>
<td>0.486***</td>
<td>0.290***</td>
<td>0.427***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.105)</td>
<td>(0.088)</td>
<td>(0.124)</td>
<td>(0.100)</td>
<td>(0.123)</td>
</tr>
<tr>
<td></td>
<td>Socially impactful product</td>
<td>0.265</td>
<td>0.171</td>
<td>0.199</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.183)</td>
<td>(0.197)</td>
<td>(0.195)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally impactful product</td>
<td>-0.055</td>
<td>-0.053</td>
<td>-0.053</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.134)</td>
<td>(0.155)</td>
<td>(0.154)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially impactful industries</td>
<td>0.161</td>
<td>0.066</td>
<td>0.026</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.184)</td>
<td>(0.196)</td>
<td>(0.194)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally impactful industries</td>
<td>-0.360***</td>
<td>-0.331**</td>
<td>-0.321**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.132)</td>
<td>(0.141)</td>
<td>(0.141)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socially impactful product AND industries</td>
<td>0.640***</td>
<td>0.553***</td>
<td>0.499**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.154)</td>
<td>(0.177)</td>
<td>(0.178)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmentally impactful product AND industries</td>
<td>-0.055</td>
<td>0.019</td>
<td>0.033</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.143)</td>
<td>(0.170)</td>
<td>(0.169)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial resources</td>
<td>Available slack</td>
<td>0.177**</td>
<td>0.144*</td>
<td>0.151*</td>
<td>0.125*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.060)</td>
<td>(0.075)</td>
<td>(0.079)</td>
<td>(0.075)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recoverable slack</td>
<td>-0.142</td>
<td>-0.027</td>
<td>-0.112</td>
<td>-0.007</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.138)</td>
<td>(0.130)</td>
<td>(0.137)</td>
<td>(0.129)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potential slack</td>
<td>-0.064**</td>
<td>-0.059**</td>
<td>-0.059**</td>
<td>-0.059**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.029)</td>
<td>(0.028)</td>
<td>(0.029)</td>
<td>(0.028)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supply management &quot;philosophy&quot; Supplier development programmes</td>
<td>0.138***</td>
<td>0.086*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.052)</td>
<td>(0.049)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N: 320  320  267  267  267  267  
R-squared: 0.400  0.191  0.441  0.245  0.456  0.254  
Adjusted R-squared: 0.368  0.148  0.397  0.187  0.412  0.193  

*p<0.01  **p<0.05  *p<0.10  
The regression results presented in tables 27, 28 and 29 are based on a list-wise exclusion approach to missing variables, which resulted in 267 unique cases. However, a pair-wise
exclusion approach, which increased the number of observations, yielded almost identical results.

The first set of results are given in table 27, which are based on the entire sample, and as such, it represents the influence of organisational slack on a typical firm’s RPSM performance. Models 1 and 2 represent the benchmark models for models 3, 4, 5, and 6. A few points are worth noting before considering the role of financial resources (organisational slack) in shaping RPSM. First, firms’ size is shown to be a key factor in shaping their RPSM practices and accounts for 4.8 percent and 2.6 percent of the variation of socially and environmentally RPSM, respectively. Second, supplier location (sourcing country) is also a significant factor in shaping RPSM practices, particularly socially RPSM practices (model 1), where it accounts for nearly 18 percent of the variation in socially RPSM. Third, the importance of the purchased product and the relative buyer power are also important in shaping RPSM. These observations are, as expected, in line with the findings of the base model in the previous chapter (chapter 8). It can also be observed that the statistical model gives a much better representation of socially RPSM, compared to environmentally RPSM.

Models 3 and 4 represent the base models of 1 and 2, but with the organisational slack variables added to the regression. In the case of both socially (model 3) and environmentally (model 4) RPSM, it is clear that available slack is a strong predictor of both. Similarly, potential slack significantly influences RPSM, but at a smaller magnitude.

Models 5 and 6 include the supply “philosophy” variable of supplier development efforts. This variable was included in order to establish whether financial resources improve a firm’s investment and development of its suppliers. The results show that supplier development efforts are playing a significant role in shaping RPSM, but of more interest to this research, a reduction in the influence of financial resources on RPSM can also be observed. In model 5 and 6 it can also be observed that the effect of available slack is reduced once the supplier development variable is introduced to the regression analysis. This suggests that firms that have available financial resources invest to a greater extent in the development of suppliers,
which in turn improves social and environmental purchasing and supply management performance.

Table 28 replicates the regressions of table 27, but to the context of the B2C sector only. Models 7 and 8 show that there are significant country effects influencing the B2C sector’s engagement with both socially and environmentally RPSM. For example, RPSM is strongly implemented with suppliers from China, South East Asia and “Other”. In addition, the results show that RPSM is significantly influenced by firms’ size, but by transaction-specific characteristics, such as the power imbalance or the importance of the procured product.

Models 9 and 10 include the organisational slack variables. However, these have no effect on RPSM practices in the B2C sector. Models 11 and 12, include the supplier development variables. These findings show that supplier development efforts are only significant in shaping socially, and not environmentally, RPSM practices.

The key finding of the results presented in table 28, is therefore that financial resources has no significant influence on RPSM practices in the B2C sector, but there is some evidence to suggest that financial resources in particular available slack, is positively associated with supplier development efforts, given the correlation figures above, and the strong insignificance of this variable once the supplier development variable is included in the regression analysis.
Table 28 - Regression Analysis, Organisational Slack and RPSM, Business-to-Consumer

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 7</td>
<td>Model 8</td>
<td>Model 9</td>
<td>Model 10</td>
<td>Model 11</td>
<td>Model 12</td>
</tr>
<tr>
<td>Constant</td>
<td>0.520</td>
<td>1.864***</td>
<td>0.680</td>
<td>2.017***</td>
<td>0.815</td>
<td>2.014***</td>
</tr>
<tr>
<td></td>
<td>(0.365)</td>
<td>(0.315)</td>
<td>(0.509)</td>
<td>(0.425)</td>
<td>(0.504)</td>
<td>(0.429)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.158***</td>
<td>0.078***</td>
<td>0.160***</td>
<td>0.083**</td>
<td>0.150**</td>
<td>0.083**</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.030)</td>
<td>(0.040)</td>
<td>(0.035)</td>
<td>(0.040)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Supplier location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>0.341</td>
<td>0.095</td>
<td>0.288</td>
<td>-0.123</td>
<td>0.215</td>
<td>-0.123</td>
</tr>
<tr>
<td></td>
<td>(0.321)</td>
<td>(0.296)</td>
<td>(0.420)</td>
<td>(0.369)</td>
<td>(0.414)</td>
<td>(0.371)</td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Europe</td>
<td>0.006</td>
<td>0.025</td>
<td>0.022</td>
<td>-0.067</td>
<td>0.019</td>
<td>-0.067</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td>(0.182)</td>
<td>(0.266)</td>
<td>(0.227)</td>
<td>(0.261)</td>
<td>(0.228)</td>
</tr>
<tr>
<td>India</td>
<td>0.084</td>
<td>-0.411</td>
<td>0.203</td>
<td>-0.330</td>
<td>0.288</td>
<td>-0.331</td>
</tr>
<tr>
<td></td>
<td>(0.324)</td>
<td>(0.285)</td>
<td>(0.371)</td>
<td>(0.323)</td>
<td>(0.368)</td>
<td>(0.325)</td>
</tr>
<tr>
<td>China</td>
<td>1.347***</td>
<td>0.332**</td>
<td>1.314***</td>
<td>0.253</td>
<td>1.173***</td>
<td>0.256</td>
</tr>
<tr>
<td></td>
<td>(0.229)</td>
<td>(0.196)</td>
<td>(0.258)</td>
<td>(0.219)</td>
<td>(0.262)</td>
<td>(0.229)</td>
</tr>
<tr>
<td>South East Asia</td>
<td>1.362***</td>
<td>0.493**</td>
<td>1.445***</td>
<td>0.461</td>
<td>1.470***</td>
<td>0.460</td>
</tr>
<tr>
<td></td>
<td>(0.260)</td>
<td>(0.227)</td>
<td>(0.321)</td>
<td>(0.280)</td>
<td>(0.316)</td>
<td>(0.282)</td>
</tr>
<tr>
<td>Others</td>
<td>1.019***</td>
<td>0.579**</td>
<td>0.626</td>
<td>0.442</td>
<td>0.553</td>
<td>0.444</td>
</tr>
<tr>
<td></td>
<td>(0.324)</td>
<td>(0.275)</td>
<td>(0.396)</td>
<td>(0.336)</td>
<td>(0.391)</td>
<td>(0.340)</td>
</tr>
<tr>
<td>Transaction characterist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>0.023</td>
<td>-0.003</td>
<td>0.034</td>
<td>-0.011</td>
<td>0.021</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.080)</td>
<td>(0.070)</td>
<td>(0.101)</td>
<td>(0.089)</td>
<td>(0.099)</td>
<td>(0.089)</td>
</tr>
<tr>
<td>Service binary variable</td>
<td>-0.254</td>
<td>-0.382*</td>
<td>-0.437</td>
<td>-0.597**</td>
<td>-0.403</td>
<td>-0.598**</td>
</tr>
<tr>
<td></td>
<td>(0.233)</td>
<td>(0.195)</td>
<td>(0.303)</td>
<td>(0.243)</td>
<td>(0.099)</td>
<td>(0.244)</td>
</tr>
<tr>
<td>Product complexity</td>
<td>0.059</td>
<td>0.091</td>
<td>0.027</td>
<td>0.118</td>
<td>-0.006</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>(0.082)</td>
<td>(0.072)</td>
<td>(0.097)</td>
<td>(0.064)</td>
<td>(0.097)</td>
<td>(0.096)</td>
</tr>
<tr>
<td>Product importance</td>
<td>0.150**</td>
<td>0.036</td>
<td>0.159**</td>
<td>0.040</td>
<td>0.197**</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.072)</td>
<td>(0.093)</td>
<td>(0.081)</td>
<td>(0.092)</td>
<td>(0.081)</td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.064</td>
<td>0.099**</td>
<td>0.110</td>
<td>0.134**</td>
<td>0.093</td>
<td>0.135**</td>
</tr>
<tr>
<td></td>
<td>(0.064)</td>
<td>(0.055)</td>
<td>(0.075)</td>
<td>(0.065)</td>
<td>(0.074)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Industry and product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful product</td>
<td>0.563*</td>
<td>0.479</td>
<td>0.518</td>
<td>0.625**</td>
<td>0.625**</td>
<td>0.625**</td>
</tr>
<tr>
<td></td>
<td>(0.290)</td>
<td>(0.348)</td>
<td>(0.343)</td>
<td>(0.294)</td>
<td>(0.294)</td>
<td>(0.294)</td>
</tr>
<tr>
<td>Environmentally impactful product</td>
<td>0.319</td>
<td>0.232</td>
<td>0.623**</td>
<td>0.288</td>
<td>0.132</td>
<td>0.132</td>
</tr>
<tr>
<td></td>
<td>(0.213)</td>
<td>(0.257)</td>
<td>(0.288)</td>
<td>(0.254)</td>
<td>(0.254)</td>
<td>(0.254)</td>
</tr>
<tr>
<td>Socially impactful industries</td>
<td>0.266</td>
<td>0.193</td>
<td>0.620***</td>
<td>0.188</td>
<td>0.620***</td>
<td>0.188</td>
</tr>
<tr>
<td></td>
<td>(0.180)</td>
<td>(0.221)</td>
<td>(0.227)</td>
<td>(0.227)</td>
<td>(0.227)</td>
<td>(0.227)</td>
</tr>
<tr>
<td>Environmentally impactful industries</td>
<td>0.864***</td>
<td>0.578***</td>
<td>0.022**</td>
<td>0.200</td>
<td>0.066</td>
<td>0.200</td>
</tr>
<tr>
<td>Financial resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available slack</td>
<td>0.108</td>
<td>-0.023</td>
<td>0.073</td>
<td>-0.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.153)</td>
<td>(0.129)</td>
<td>(0.151)</td>
<td>(0.131)</td>
<td>(0.131)</td>
<td>(0.131)</td>
</tr>
<tr>
<td>Recoverable slack</td>
<td>-0.390</td>
<td>-0.041</td>
<td>-0.298</td>
<td>-0.043</td>
<td>-0.298</td>
<td>-0.043</td>
</tr>
<tr>
<td></td>
<td>(0.238)</td>
<td>(0.207)</td>
<td>(0.238)</td>
<td>(0.207)</td>
<td>(0.238)</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Potential slack</td>
<td>-0.035</td>
<td>-0.004</td>
<td>-0.050</td>
<td>-0.054</td>
<td>-0.050</td>
<td>-0.054</td>
</tr>
<tr>
<td></td>
<td>(0.046)</td>
<td>(0.041)</td>
<td>(0.046)</td>
<td>(0.042)</td>
<td>(0.042)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>Supply management “philosophy”</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier development programmes</td>
<td>0.219**</td>
<td>-0.005</td>
<td></td>
<td>(0.101)</td>
<td>(0.091)</td>
<td></td>
</tr>
</tbody>
</table>

**p<0.05  ***p<0.01  **p<0.10

Table 29 replicates the regressions of tables 27 and 28, but to the context of the B2B sector. The results of models 13 and 14 show that the country dummy variables are significant influences in shaping RPSM. The importance of the product and the imbalance of power in the relationship also play a role in shaping socially and environmentally RPSM practices.
### Table 29 - Regression Analysis, Organisational Slack and RPSM, Business-to-Business

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 13</td>
<td>Model 14</td>
<td>Model 15</td>
<td>Model 16</td>
<td>Model 17</td>
<td>Model 18</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.694**</td>
<td>1.097***</td>
<td>0.612</td>
<td>0.785*</td>
<td>0.799**</td>
<td>0.991**</td>
</tr>
<tr>
<td></td>
<td>(0.313)</td>
<td>(0.322)</td>
<td>(0.412)</td>
<td>(0.427)</td>
<td>(0.420)</td>
<td>(0.438)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.107***</td>
<td>0.144***</td>
<td>0.102***</td>
<td>0.150***</td>
<td>0.082**</td>
<td>0.136***</td>
</tr>
<tr>
<td></td>
<td>(0.034)</td>
<td>(0.036)</td>
<td>(0.036)</td>
<td>(0.038)</td>
<td>(0.037)</td>
<td>(0.040)</td>
</tr>
<tr>
<td>Supplier location</td>
<td>USA</td>
<td>0.437**</td>
<td>0.078</td>
<td>0.480**</td>
<td>0.034</td>
<td>0.537**</td>
</tr>
<tr>
<td></td>
<td>(0.222)</td>
<td>(0.224)</td>
<td>(0.227)</td>
<td>(0.230)</td>
<td>(0.227)</td>
<td>(0.232)</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td>-0.185</td>
<td>-0.082</td>
<td>-0.156</td>
<td>-0.056</td>
<td>-0.154</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.160)</td>
<td>(0.165)</td>
<td>(0.165)</td>
<td>(0.169)</td>
<td>(0.163)</td>
</tr>
<tr>
<td></td>
<td>West Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>0.437**</td>
<td>-0.885***</td>
<td>0.507</td>
<td>-0.819**</td>
<td>0.521**</td>
</tr>
<tr>
<td></td>
<td>(0.304)</td>
<td>(0.316)</td>
<td>(0.325)</td>
<td>(0.336)</td>
<td>(0.327)</td>
<td>(0.343)</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>0.917***</td>
<td>-0.222</td>
<td>1.014***</td>
<td>-0.025</td>
<td>1.001***</td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.230)</td>
<td>(0.232)</td>
<td>(0.243)</td>
<td>(0.230)</td>
<td>(0.243)</td>
</tr>
<tr>
<td></td>
<td>South East Asia</td>
<td>0.822**</td>
<td>0.264</td>
<td>0.763**</td>
<td>0.248</td>
<td>0.736**</td>
</tr>
<tr>
<td></td>
<td>(0.325)</td>
<td>(0.333)</td>
<td>(0.333)</td>
<td>(0.335)</td>
<td>(0.335)</td>
<td>(0.330)</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>-0.113</td>
<td>-0.612*</td>
<td>-0.293</td>
<td>-0.720*</td>
<td>-0.252</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.338)</td>
<td>(0.334)</td>
<td>(0.380)</td>
<td>(0.371)</td>
<td>(0.371)</td>
</tr>
<tr>
<td><strong>Transaction characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>0.049</td>
<td>-0.016</td>
<td>0.052</td>
<td>0.010</td>
<td>0.051</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.056)</td>
<td>(0.058)</td>
<td>(0.058)</td>
<td>(0.060)</td>
<td>(0.058)</td>
<td>(0.060)</td>
</tr>
<tr>
<td>Service binary variable</td>
<td>0.218</td>
<td>0.210</td>
<td>0.151</td>
<td>0.154</td>
<td>0.174</td>
<td>0.169</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.149)</td>
<td>(0.144)</td>
<td>(0.149)</td>
<td>(0.148)</td>
<td>(0.152)</td>
</tr>
<tr>
<td>Product complexity</td>
<td>-0.008</td>
<td>0.073</td>
<td>-0.007</td>
<td>0.073</td>
<td>-0.022</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.070)</td>
<td>(0.071)</td>
<td>(0.072)</td>
<td>(0.070)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>Product importance</td>
<td>0.165**</td>
<td>0.141***</td>
<td>0.118*</td>
<td>0.121*</td>
<td>0.093</td>
<td>0.104</td>
</tr>
<tr>
<td></td>
<td>(0.068)</td>
<td>(0.069)</td>
<td>(0.070)</td>
<td>(0.071)</td>
<td>(0.070)</td>
<td>(0.072)</td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.115**</td>
<td>0.099**</td>
<td>0.124**</td>
<td>0.106**</td>
<td>0.122**</td>
<td>0.108**</td>
</tr>
<tr>
<td></td>
<td>(0.051)</td>
<td>(0.050)</td>
<td>(0.052)</td>
<td>(0.051)</td>
<td>(0.052)</td>
<td>(0.051)</td>
</tr>
<tr>
<td><strong>Industry and product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful product</td>
<td>0.020</td>
<td>-0.020</td>
<td>-0.015</td>
<td>-0.015</td>
<td>0.119</td>
<td>0.119</td>
</tr>
<tr>
<td></td>
<td>(0.224)</td>
<td>(0.221)</td>
<td>(0.221)</td>
<td>(0.221)</td>
<td>(0.221)</td>
<td>(0.221)</td>
</tr>
<tr>
<td>Environmentally impactful product</td>
<td>-0.189</td>
<td>0.016</td>
<td>-0.348*</td>
<td>-0.335*</td>
<td>-0.335*</td>
<td>(0.178)</td>
</tr>
<tr>
<td></td>
<td>(0.149)</td>
<td>(0.144)</td>
<td>(0.149)</td>
<td>(0.152)</td>
<td>(0.152)</td>
<td>(0.178)</td>
</tr>
<tr>
<td>Socially impactful industries</td>
<td>0.640</td>
<td>0.526</td>
<td>0.404</td>
<td>0.404</td>
<td>0.404</td>
<td>0.404</td>
</tr>
<tr>
<td></td>
<td>(0.725)</td>
<td>(0.712)</td>
<td>(0.712)</td>
<td>(0.708)</td>
<td>(0.708)</td>
<td>(0.708)</td>
</tr>
<tr>
<td>Environmentally impactful industries</td>
<td>-0.228</td>
<td>0.185</td>
<td>-0.296</td>
<td>-0.266</td>
<td>-0.266</td>
<td>-0.266</td>
</tr>
<tr>
<td></td>
<td>(0.455)</td>
<td>(0.459)</td>
<td>(0.459)</td>
<td>(0.466)</td>
<td>(0.466)</td>
<td>(0.466)</td>
</tr>
<tr>
<td>Socially impactful product AND industries</td>
<td>-0.292</td>
<td>0.182</td>
<td>-0.245</td>
<td>-0.304</td>
<td>-0.304</td>
<td>-0.304</td>
</tr>
<tr>
<td></td>
<td>(0.455)</td>
<td>(0.459)</td>
<td>(0.459)</td>
<td>(0.466)</td>
<td>(0.466)</td>
<td>(0.466)</td>
</tr>
<tr>
<td>Environmentally impactful product AND industries</td>
<td>-0.132</td>
<td>0.209</td>
<td>-0.134</td>
<td>-0.137</td>
<td>-0.137</td>
<td>-0.137</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.211)</td>
<td>(0.211)</td>
<td>(0.210)</td>
<td>(0.210)</td>
<td>(0.210)</td>
</tr>
<tr>
<td><strong>Financial resources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available slack</td>
<td>0.189**</td>
<td>0.193**</td>
<td>0.168*</td>
<td>0.168*</td>
<td>0.177*</td>
<td>0.177*</td>
</tr>
<tr>
<td></td>
<td>(0.088)</td>
<td>(0.090)</td>
<td>(0.098)</td>
<td>(0.098)</td>
<td>(0.091)</td>
<td>(0.091)</td>
</tr>
<tr>
<td>Recoverable slack</td>
<td>0.023</td>
<td>0.157</td>
<td>0.008</td>
<td>0.147</td>
<td>0.008</td>
<td>0.147</td>
</tr>
<tr>
<td></td>
<td>(0.177)</td>
<td>(0.181)</td>
<td>(0.175)</td>
<td>(0.181)</td>
<td>(0.175)</td>
<td>(0.181)</td>
</tr>
<tr>
<td>Potential slack</td>
<td>0.093**</td>
<td>0.067*</td>
<td>-0.046</td>
<td>-0.046</td>
<td>-0.046</td>
<td>-0.046</td>
</tr>
<tr>
<td></td>
<td>(0.037)</td>
<td>(0.038)</td>
<td>(0.038)</td>
<td>(0.036)</td>
<td>(0.036)</td>
<td>(0.036)</td>
</tr>
<tr>
<td><strong>Supplier development programmes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>153</td>
<td>153</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.354</td>
<td>0.231</td>
<td>0.370</td>
<td>0.311</td>
<td>0.388</td>
<td>0.360</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.228</td>
<td>0.147</td>
<td>0.276</td>
<td>0.208</td>
<td>0.291</td>
<td>0.212</td>
</tr>
</tbody>
</table>

Models 15 and 16 introduce the organisational slack variables to the base model of models 13 and 14. The results are similar to those of table 27, and hence available slack and potential slack significantly influence RPSM. In model 15, the results suggest that organisational slack is as strong a predictor of RPSM and accounts for 6.5 percent of the variation of socially
RPSM practices. Contrasted with model 13, the adjusted R-squared also increased by nearly 7.0%.

In model 16 available slack, in particular, shapes environmentally RPSM and explains nearly 6 percent of the variation of the environmentally RPSM variable, and hence is a significant factor in shaping such practices, as it accounts for a greater contribution to the model fit than individual country effects or individual transaction-specific characteristics.

Models 17 and 18 introduce the supplier development variable to account for any mediating effects between financial resources and RPSM. The results show that the explanatory power of both available and potential slack is reduced by introducing this variable, suggesting that financial resources is influencing supplier development efforts in the B2B sector, and that it has a somewhat indirect effect on RPSM through its influence on supplier development initiatives. Furthermore, there is some evidence to suggest that firm size has a positive impact on supplier development, which in turn influences RPSM. Introducing the supplier development variable reduces the significance of the purchased product’s importance, suggesting that when firms purchase products that are valuable to them in terms of their end-product, they have much better supply management systems in place and strategically invest more heavily in the supplier.

Finally, the results of table 30 are offered, in support of both the above regression analysis and the discussion and conclusion section that follows. The figures below represent each slack’s single magnitude and significance if they were not considered as a group, but only included individually into the models that were discussed above. These results are intended to complement the above regression in two ways. First, introducing the variables into the model individually significantly increases the degrees of freedom and as such offers a more reliable insight into the role of financial resources and slack as drivers of RPSM. Second, the correlation figures introduced earlier showed strong correlation between the different types of slack, in particular in terms of available and potential slack. This in turn may have caused problems of multicollinearity, and indeed comparing the significance of the available and
potential slack variables given in table 26 suggest that multicollinearity may be a slight problem in the previous regression analysis.\(^{16}\)

### Table 30 - Supporting Evidence, Organisational Slack and RPSM

<table>
<thead>
<tr>
<th></th>
<th>Socially Responsible Purchasing and Supply Performance</th>
<th>Environmentally Responsible Purchasing and Supply Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Available slack</strong></td>
<td>0.165**</td>
<td>0.059</td>
</tr>
<tr>
<td>(N=316)</td>
<td>(N=163)</td>
<td>(N=153)</td>
</tr>
<tr>
<td><strong>Recoverable slack</strong></td>
<td>-0.140</td>
<td>-0.427**</td>
</tr>
<tr>
<td>(N=309)</td>
<td>(N=158)</td>
<td>(N=151)</td>
</tr>
<tr>
<td><strong>Potential slack</strong></td>
<td>-0.069***</td>
<td>-0.051</td>
</tr>
<tr>
<td>(N=275)</td>
<td>(N=135)</td>
<td>(N=140)</td>
</tr>
</tbody>
</table>

***p<0.01  
**p<0.05  
*p<0.10

### Regression Run Without the Supplier Development Variable

<table>
<thead>
<tr>
<th></th>
<th>Socially Responsible Purchasing and Supply Performance</th>
<th>Environmentally Responsible Purchasing and Supply Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Available slack</strong></td>
<td>0.192***</td>
<td>0.065</td>
</tr>
<tr>
<td>(N=316)</td>
<td>(N=163)</td>
<td>(N=153)</td>
</tr>
<tr>
<td><strong>Recoverable slack</strong></td>
<td>-0.180</td>
<td>-0.502**</td>
</tr>
<tr>
<td>(N=309)</td>
<td>(N=158)</td>
<td>(N=151)</td>
</tr>
<tr>
<td><strong>Potential slack</strong></td>
<td>-0.076***</td>
<td>-0.037</td>
</tr>
<tr>
<td>(N=275)</td>
<td>(N=135)</td>
<td>(N=140)</td>
</tr>
</tbody>
</table>

***p<0.01  
**p<0.05  
*p<0.10

\(^{16}\) The Variance Inflation Factor (VIF) did not indicate any problems of multicollinearity, but the author refers to comments of Belsley (1982, 1991) to highlight some of the problems of relying on VIF statistics to detect multicollinearity.
In summary of the analysis above, the findings show that financial resources is an important factor in shaping RPSM practices. In particular, available and potential slack are central in influencing RPSM practices for the typical firm and for firms operating in the B2B sector. However, for the B2C sector financial resources do not play a significant role.

9.5. Discussion and conclusion

This research took a resource based view of RPSM, focusing on firms’ financial resources in terms of organisational slack. Strong support was found for hypothesis 1, in that the evidence presented shows that financial resources do influence RPSM practices. Partial support was also found for hypothesis 2, as the results showed that RPSM was significantly influenced by available slack; but the results also revealed that potential slack was a major driver/barrier of RPSM, more so than recoverable slack, which was insignificant. Strong support was found for hypothesis 3, as there was significant evidence to suggest that financial resources influenced supplier development efforts. Support was also found for hypothesis 4, as financial resources was, in particular, significant in shaping RPSM practices in the B2B sector. As such the key findings of this research can be summarised as:

- Financial resources play a significant role in shaping responsible purchasing and supply management practices.

- Available slack (immediate financial resources) and potential slack (economic liabilities) are positively and negatively influencing responsible purchasing and supply management practices, respectively.

- Financial resources are in particular important for B2B firms, whereas financial resources do not play a significant role for B2C firms’ engagement with responsible purchasing and supply management.
Financial resources directly, but also indirectly, influence responsible purchasing and supply management practices, through their influence on firms’ strategic development of suppliers.

These findings suggest that RPSM is largely a discretionary activity for firms operating in a B2B market, and make an important contribution to our understanding of the circumstances in which RPSM is a strategic or discretionary activity. The lack of a significant relationship between financial resources and RPSM in the B2C market, however, suggests that both social and environmental practices are either such an integrated part of the firm, or that they are such a strategic issue that financial resources do not matter, because the benefits (intangible and tangible) outweigh the financial costs.

In conclusion, using the theory of organisational slack, this research has offered one of the first quantitative assessments of the relationship between financial resources and responsible purchasing and supply management. The findings of this research have revealed that financial resources only influence RPSM practices in the B2B sector, and have no effect on RPSM practices in the B2C sector. It is argued that the B2B sector does not integrate its RPSM practices with its business strategy, and therefore does not maximise the potential benefits of such practices, as it is always contingent on financial resources to do so. Nonetheless, there are potentials for future research. For example, further research is needed to understand why RPSM is largely a discretionary activity for B2B firms, and whether financial resources are the key to closing the gap between policy and practice (Bowen, 2002).

The evidence of this study supports propositions 3b and 4 – see chapter 4. In addition, it highlights a missing link in the conceptual framework of chapter 4, inasmuch as it shows that financial resources influence the strategic development of suppliers, which in turn influences RPSM.
CHAPTER 10
10. BUSINESS STRATEGY AND RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT

10.1. Introduction

Whereas the two previous chapters have been concerned with the first half of the conceptual framework of chapter 4, and have sought to understand the role and extent to which industry environment and financial resources influence RPSM, this chapter seeks to explore the latter half of the conceptual framework. In so doing this chapter views RPSM practices as being contingent upon a firm’s business strategy, which may directly and indirectly influence RPSM.

Socially and environmentally responsible practices have been recognised as being a salient issue for organisations, which is of major strategic importance (Dentchev, 2004; McWilliams and Siegel, 2001). This is reflected in the increasing integration of RPSM practices with the firm’s overall strategy, which has been led by a number of high-profile companies (Ansett, 2007; Phillips and Caldwell, 2005). Nonetheless, relatively little is known about the general integration of such practices with business strategy. On the one hand, the development of RPSM has been motivated by such factors as reputation management and differentiation (Fombrun and Shanley, 1990; Phillips and Caldwell, 2005; Roberts, 2003). As such, these practices have become an important function of the business strategy. On the other hand, business strategy has also been shown to influence a firm’s general attitudes and stances towards the purchasing and supply chain function, which may also influence RPSM. In this case, business strategy plays only an indirect role in RPSM, through its influence on the strategic view of the purchasing and supply chain function.

The research questions of this chapter can therefore be phrased as follows: “Does business strategy influence RPSM practices?”; and “to what extent can such relationships be explained by firms’ motivation to differentiate themselves and under what circumstances is business strategy likely to influence RPSM?” In answering these questions this chapter builds on from
the conceptual framework presented in chapter 4, and consistent with the broader framework, applies Porter’s (1980) generic strategies as a typology for business strategy.

This chapter contributes to the field by suggesting how firms should prioritise their RPSM practices depending on their business strategy. As such, this study considers the question of “why do all companies not engage in responsible supply chain management?” and argues that this is because of variation in firm’s business strategy and competitive priorities (from Cousins, 2005, p. 404).

The remainder of this chapter will first review the existing research that considers the link between business strategy and supply management, and also the link between business strategy and CSR. From these two streams of literature a set of hypotheses will be developed that proposes the relationship between business strategy and socially and environmentally responsible purchasing and supply activities. This will then be followed by a brief methodology section, which explains the business strategy measurement. Following that, the results of the empirical analysis will be presented, along with a discussion of these results. Finally, the implications of this research and further research opportunities will be discussed.

10.2. Theory and hypothesis development

In chapter 4 it was argued that business strategy directly influenced RPSM practices, proposition 1b, predominantly due to a motive of differentiation and reputation management. Nonetheless, the framework also acknowledged recent writing in the purchasing and supply chain field, and suggested that business strategy may indirectly influence RPSM through its influence on a firm’s general stances towards the purchasing and supply chain function, proposition 1c, which in turn may directly shape RPSM practices, proposition 2.
10.2.1. Conceptual model and hypothesis development

The first part of the model, illustrated in figure 23, suggests that business strategy directly influences RPSM. The direct link is caused by a motive of differentiation and reputation management. In this scenario, firms take an active and strategically deliberate role in managing their social and environmental behaviour with their suppliers, either in order to differentiate the firm/product or in order to protect the reputation of the firm/product. The direct relationship between business strategy and RPSM therefore presupposes that external CSR activities, including RPSM, may be used to signal the intangible benefits of quality and trustworthiness of the product, while also assisting the firm in targeting an ethical and more sophisticated consumer group.

Figure 23 - Conceptual Framework, Business Strategy and RPSM

In addition to the direct relationship between business strategy and RPSM, the conceptual model further posits that business strategy influences firms’ supply management processes. RPSM may in turn be a part of the firm’s general purchasing and supply management processes. As such, the conceptual model, illustrated in figure 24, suggests that the effect of business strategy on RPSM may be mediated by the influence that business strategy has on the general purchasing and supply “philosophy” of the firm, as captured by firms’ supplier development efforts.
10.2.2. **Business strategy and corporate social responsibility**

The conceptual development chapter has already discussed the relationship between business strategy and CSR engagement. To avoid repetition, this section will therefore only offer a brief overview of this relationship before developing hypotheses regarding the link between different business strategies and level of RPSM engagement.

Research has consistently argued that the benefits of CSR, including RPSM, can be generated through two means. One is the way in which CSR and RPSM can assist the firm in differentiating the firm and signal its quality. The other is in the way that CSR, and in particular such activities in the supply chain, can shield and prevent the firm from negative publicity and consumer boycotts. For example, McWilliams and Siegel (2001) argue that firms may invest in CSR practices to convey an image of being socially responsible, which, in turn, may cause consumers to believe that they are indirectly supporting a “good” social cause and therefore buy products from firms that invest in CSR. Similarly, some authors have
suggested that CSR has similar effects to advertising since it operates as a positive signal of the good/service and the firm (Bagnoli and Watts, 2003; Siegel and Vitaliano, 2007). In this respect, CSR activities become not only an important instrument for differentiation, but they also enhance the corporate reputation. Furthermore, empirical evidence has confirmed that corporate reputation is a function of the socially responsible activities of the firm (e.g. Brammer and Millington, 2005; Brammer and Pavelin, 2004; Fombrun and Shanley, 1990). CSR can therefore be used by firms to create valuable and rare resource, in terms of their reputation, which in turn will give the firm a competitive advantage (Branco and Rodrigues, 2006). Finally, it has also been suggested that firms that pursue differentiation strategies will engage more actively in stakeholder management, and to a greater extent attempt to meet the expectations of a range of stakeholders, rather than only the economic expectation of shareholders and consumers, which will often be the focus of low-cost firms (Van de Ven and Jeurissen, 2005).

Reflecting this discussion, it is argued that RPSM can be used to differentiate the product and that such practices can enhance, and protect, the corporate image. Hence, it is hypothesised that:

*Hypothesis 1: Firms that are pursuing differentiation strategies will have relatively proactive responsible purchasing and supply management practices, due to motives of product differentiation and image protection.*

In contrast to firms pursuing differentiation strategies, low-cost producers aim to exploit all sources of cost advantage. As such, these firms do not tend to engage in discretionary activities, including CSR, as these activities are costly (Van de Ven and Jeurissen, 2005). Evidence from the US apparel and footwear industry has also shown that firms that focus on price, over other purchasing criteria such as quality and image, has significantly less emphasis on fair labour arrangements. As such, firms pursuing cost leadership (low-cost) strategies neglected their social supply chain responsibilities and failed to develop open and trustworthy partnerships with their suppliers to ensure that products were ethically sourced (Park and Dickson, 2008). The UK-based organisation “Labour Behind the Label” (2006) reviewed five
low-cost retailers, and noted that their sourcing is characterised by pressure to lower prices and increase flexibility, which sends “mixed messages” when retailers also adopt ethical codes of conduct (Balakrishnan, 2007). Furthermore, their study revealed that low-cost retailers often have “fickle” relationships with suppliers and a tendency to change suppliers frequently, while also making them bid against one another. This in turn reduces the incentive for suppliers to make real efforts in order to comply with retailers’ codes of conduct (Labour Behind the Label, 2006). Similarly, the UK’s Competition Commission (2000) investigated the behaviour of supermarkets and their relationship with suppliers. Their findings showed that some of the largest supermarkets in the UK, many of which pursue low-cost strategies, exploit suppliers and due to their bargaining power often force them to bear any cost increases in the supply chain.

Whereas there appears to be a relatively clear incentive for firms that pursue differentiation strategies to engage in responsible business practices, this incentive is less apparent for low-cost producers, primarily because low-cost producers compete on price, and any increase in costs, such as the implementation of RPSM, is likely to result in a comparative disadvantage against the firms’ competitors. Furthermore, there is some evidence to suggest that consumers expect different ethical stances from firms pursuing differentiation and low cost strategies, with the general observation that they associate a positive relationship between price and ethics, and also expect to pay less for “unethical” products (e.g. Creyer and Ross, 1996; Mohr et al., 2001).

Reflecting the above arguments, it is hypothesised that:

Hypothesis 2: Firms that are pursuing low-cost strategies will have relatively weak responsible purchasing and supply management practices in place.

Firms that focus on a niche market, however, can be either reactive or proactive in their CSR strategy, depending on their competitive advantage (low cost vs. differentiation) within that market, and it is therefore uncertain what level of RPSM firms will undertake if they target a
niche market. For this reason, much in line with the work of Van de Ven and Jeurissen (2005), this study does not set out any specific hypothesis for this relationship.

10.2.3. Business strategy and supply management

Traditional models of manufacturing strategy have noted the relevance of aligning it with business strategy, “such that the former supports and efficiently contributes to the deployment of the latter” (Skinner, 1969, cited in Gonzales-Benito, 2007, p. 902; Ward et al., 1996). A general observation from this strand of literature suggests that firms that pursue differentiation strategies have a much greater focus on quality and flexibility, compared to cost leaders and firms that pursue low-cost strategies.

The relationship between business strategy and manufacturing strategy has recently been extended to the relationship and alignment between purchasing and supply chain strategy and business strategy. González-Benito (2007, p. 902) argues that purchasing’s contribution to the firm’s performance depends on the “degree to which purchasing capabilities fit with and support the business strategy”. Similarly, Baier et al. (2008) argued that the fit between business strategy, purchasing strategy and practices are the key to achieving superior financial performance. Narasimhan and Carter (1998) note that purchasing strategies and practices vary, depending on product and market characteristics as well as the technological intensity of the product. Without this alignment the purchasing function can arguably not be a source of competitive advantage (Narasimhan and Carter, 1998), because only by developing a purchasing strategy that “focuses on the character of its [the firm’s] competitive strength, a firm can enhance its market position” (Rajagopal and Bernard, 1993, p.14, cited in Knudsen, 2003). It therefore seems clear that the purchasing “function cannot be viewed in isolation in a firm”, and it is necessary for the firm’s performance that its purchasing “function operates in conjunction with the corporation” and its competitive strategy (Knudsen, 2003, p. 720; Watts et al., 1995).
Existing research has highlighted a number of valuable insights into the relationship between business strategy and the purchasing and supply function. Cousins (2005) interviewed 142 large manufacturing firms in the UK, and found that firms pursuing business strategies that were cost focused generally considered the supply function to be one of cost-reduction. Firms that pursued low-cost strategies therefore perceived purchasing and supply activities as passive and supportive. In contrast, firms pursuing differentiation strategies engage in strategic collaboration with suppliers, and therefore align their customer requirements, and develop joint market entry strategies and capital expenditure plans. Furthermore, firms pursuing differentiation strategies took a long-term strategic view of the business outcomes, as a result of the supply procedures, whereas low-cost firms took a short-term tactical approach to the supply function. However, as acknowledged by Cousins (2005), these observations do not mean that the supply chain function is unimportant to low-cost firms, because it is still essential as a tactical weapon that allows the firm to enter into a stronger cost management position. In contrast, differentiation firms are more likely to develop strategic processes with their suppliers and utilise collaborative advantages, whilst also dividing the level of risk and rewards gained. Narasimhan and Carter (1998) surveyed 369 companies and found that firms whose competitive direction was differentiation/customisation, prioritised suppliers with product innovation, technological leadership, total quality management and internal organisational integration. In contrast, firms pursuing traditional and manufacturing-oriented strategies (low-cost) prioritised rapid volume change, fast delivery, low prices and external organisational integration.

The findings of Baier et al. (2008) also highlight the implications of a misalignment of business strategy and purchasing strategy for firms’ performance. Their findings showed that low-cost firms focused on knowledge and information management, organisational structure, performance management, mindsets and aspiration. Differentiation strategies, however, focused on supplier management, talent management, purchasing integration and core purchasing processes. Deviation from these dimensions, however, was consistently associated with lower financial performance. Similar observation were noted by González-Benito (2007) who found that the fit between business strategy and procurement strategy significantly
moderated the relationship between purchasing efficacy, as measured by the fit between purchasing strategy and capabilities, and firms’ performance.

The literature on business strategy and the purchasing and supply function has thus consistently shown significant differences in firms’ attitudes, use and investment of their purchasing and supply function which are contingent on their business strategy. As such, business strategy may indirectly influence RPSM practices, through its influence on the general stances towards the purchasing and supply chain function. Given this discussion, it is hypothesised that:

*Hypothesis 3a*: Firms that pursue a differentiation strategy engage comparatively actively in supplier development, and as a result the differentiation strategy and RPSM relationship is positively mediated by the level of supplier development.

*Hypothesis 3b*: Firms that pursue low cost (cost leadership) strategies comparatively neglect their supplier development efforts, and as a result the low-cost strategy and RPSM relationship is negatively mediated by the level of supplier development.

10.2.4. **Target market**

Much of the preceding discussion on the relationship between business strategy and CSR/RPSM, has suggested that business strategy influences RPSM because it either sends a signal to consumers or because it protects the image of the firm. From this perspective RPSM seeks to entice consumer purchase and prevent consumer boycott. Consumers are therefore at the centre of the business strategy and RPSM relationship and producers of consumer products have especially come under scrutiny for their socially and environmentally irresponsible supply chain practices, as noted by Bremer and Udovich (2001), Locke et al., (2007), Phillips and Caldwell (2005), Roberts (2003), and Sirgy and Lee (2008). Given this, this research
argues that business strategy is in particular playing a significant role in shaping RPSM activities in the B2C market, compared to the B2B market.

Furthermore, studies that have examined how ethics play a role in the purchasing decision have focused both on consumer-orientated products and on the extent to which final consumers are willing to pay for “ethical” products. Although these studies have provided mixed results they have highlighted that CSR and RPSM play a role in signalling the social and environmental responsibility of the firm and product (Carrigan and Attalla, 2001; Mohr et al., 2001). In addition, scholars who have considered the strategic emphasis of CSR have also emphasised the use of CSR as a signalling instrument for the consumer market (McWilliams and Siegel, 2001; Siegel and Vitaliano, 2007).

Given this discussion, this study hypothesises that:

*Hypothesis 4: The relationship between business strategy and responsible purchasing and supply management is moderated by the target market.*

The preceding section has outlined a number of hypotheses related to the relationship between business strategy and RPSM. Noticeably, it has highlighted how firms that pursue differentiation strategies are in particular inclined to engage actively in RPSM, whereas firms that pursue low-cost strategies tend to neglect such activities. Furthermore, these two types of business strategy have also been argued to influence a firm’s general purchasing and supply chain practices, which, in turn, mediates positively and negatively the relationship between differentiation/low-cost strategies and RPSM, respectively. Finally, the above section has suggested that business strategy plays in particular a significant role in markets where firms are selling products/services to B2C markets.
10.3.  **Methodology**

10.3.1.  **Sample and data**

As described in chapter 5 and 7.

10.3.2.  **Measurements**

For empirical assessment, there are in particular two lines of work, in terms of business strategy terminology, which have been used in previous research: Miles and Snow’s organisational types and Porter’s generic strategies. Of these two, Porter’s generic strategies have, in particular, received considerable conceptual and empirical attention (Wright, 1987). Campbell-Hunt (2000, p. 127) argues that the “…theory of generic competitive strategy is unquestionably among the most substantial and influential contributions that have been made to the study of strategic behaviour in organisations”. Similarly, Parnell (2006, p. 1139) notes that most of “our understanding of competitive strategy can be traced” back to the work of Porter (1980, 1985), and for empirical research the framework has been found to be a “…parsimonious, yet robust…” framework (Williams et al. 1995, p. 25). Miller and Dess (1993, p. 553) also note that the simplicity of the generic strategies captures much of “…the complexity inherent in strategic gestalts.” Given its empirical popularity, this research makes use of Porter’s generic strategies to assess the relationship between business strategy, supplier development and RPSM. Much of the existing research, as discussed above, also tends to use Porter’s generic strategies, and distinguish, between firms that pursue low-cost and differentiation strategies.

In measuring firms’ generic strategies, researchers have used a number of approaches. Miller and Friesen (1986) and Dess and Davis (1984) construct the generic strategy variables using cluster analysis and by asking respondents to rank a number of measurements, including product development, brand identification, advertising, innovation, competitive pricing, customer service, efficiency and reputation, and target segment. In contrast, Miller and Dess
(1993) use secondary data from the PIMS database and assess firms’ strategy according to the variables of relative costs and relative product quality. However, for the purpose of this research the approach, and questions, of Parnell (1997) and Powell (1992) was followed and thus a set of questions to evaluate firms’ generic strategy in terms of costs, differentiation and breadth of the market was developed. Respondents were asked to indicate, on a Likert scale from 1 to 7, the accuracy of eight statements, given in table 31, where 1 denoted “Not at all accurate” and 7 denoted “Very accurate”. Principal component analysis was subsequently conducted in order to establish the variables for the generic strategies.

**Table 31 - Factor Analysis, Business Strategies**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>0.652</td>
<td>0.461</td>
<td>-0.145</td>
</tr>
<tr>
<td>Q2</td>
<td>0.340</td>
<td>0.424</td>
<td>0.341</td>
</tr>
<tr>
<td>Q3</td>
<td>-0.709</td>
<td>-0.008</td>
<td>0.395</td>
</tr>
<tr>
<td>Q4</td>
<td>-0.754</td>
<td>0.143</td>
<td>0.406</td>
</tr>
<tr>
<td>Q5</td>
<td>-0.121</td>
<td>0.801</td>
<td>0.022</td>
</tr>
<tr>
<td>Q6</td>
<td>-0.181</td>
<td>0.802</td>
<td>0.019</td>
</tr>
<tr>
<td>Q7</td>
<td>0.424</td>
<td>-0.217</td>
<td>0.685</td>
</tr>
<tr>
<td>Q8</td>
<td>0.369</td>
<td>-0.022</td>
<td>0.760</td>
</tr>
</tbody>
</table>

The factor analysis identified three components, rather than four as suggested by Powell (1992). Component 1 captures a low-cost strategy variable, as high loading on Q1 is observed but negative loading of Q3 and Q4, suggesting that cost leadership and ‘high-quality’ differentiation strategies are opposite strategies. Component 2 also captures differentiation, but rather than differentiation through high quality, as in component 1, component 2 captures differentiation through innovation. The final component (3) of the factor analysis is the niche (focus) strategy, where the breadth of the market is narrow and firms are targeting a specific
and well-defined customer group. Factors 1 and 2 are therefore in line with the argument of Miller (1988), who suggested that there are two types of differentiation: one which is based on product innovation (factor 2) and one which is based on differentiation through marketing and image management (opposite of factor 1).

Based on the reliability score (Cronbach alpha), three generic strategies were identified: 1) low-cost (opposite of ‘high quality’ differentiation); 2) differentiation through innovation; and 3) niche strategy, as shown in table 3. For the following analysis these strategic typologies are denominated as LOWPRICE, INNOVATION and NICHE. However, the reader should bear in mind that LOWPRICE is the cost leadership strategy of Porter (1980) and is a proxy for the opposite of ‘high-quality’ differentiation. In extension to this, the reader should also note that INNOVATION is an element of differentiation, which is characterised by heavy research and development investment. This factor is therefore concerned with innovation and technology.

Table 3- Factor and Reliability Analysis, Business Strategies

<table>
<thead>
<tr>
<th>Low price strategy</th>
<th>Innovation strategy</th>
<th>Niche strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor Loading</td>
<td>Factor Loading</td>
<td>Factor Loading</td>
</tr>
<tr>
<td>Q1 -0.709</td>
<td>Q5 0.861</td>
<td>Q7 0.863</td>
</tr>
<tr>
<td>Q3 0.832</td>
<td>Q6 0.861</td>
<td>Q8 0.863</td>
</tr>
<tr>
<td>Q4 0.808</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cronbach alpha</td>
<td>Cronbach alpha</td>
<td>Cronbach alpha</td>
</tr>
<tr>
<td>0.683</td>
<td>0.651</td>
<td>0.646</td>
</tr>
</tbody>
</table>

Control variables include those discussed in chapter 7. Similarly, the construct for supply management “philosophy”, was measured by ‘supplier development’ as also discussed in the methodology section.

As a way of triangulating and benchmarking the findings from the primary data, a set of regression analysis based on secondary data to validate and assess the true extent to which business strategy shapes a firm’s RPSM practices is also offered. More specifically, the
literature has argued that R&D and advertising are vital components of firms that pursue differentiation strategies, and as such that R&D and advertising intensity would measure differentiation through innovations and differentiation through branding, respectively. Therefore the final set of regression analyses within this chapter should be considered as complementary to the findings of the primary data. This research captures R&D intensity as a ratio of the firm’s total R&D to its total sales. These figures were obtained from FAME, and where there was no information on R&D expenditure, it was assumed that R&D expenditure equalled zero. Capturing firms’ propensity to differentiate themselves through advertising and branding is more difficult than capturing R&D intensity, since firms’ advertising expenditure is not available in the public domain. Researchers have therefore suggested using a binary variable that serves as a proxy for advertising intensity, by considering the top 100 advertisers and Britain’s 100 biggest brands, as measured by either the Nielsen Media Company or Marketing. One implication of this however is that firms that fall within these two groups tend to be B2C firms. In fact, within the sample, all the firms that appeared on the 2007 list of top advertisers or ‘Britain’s Biggest Brands’ were in the B2C groups. As an alternative therefore, this research deploys a binary variable given by the Centre for Brand Analysis to capture the extent to which firms pursue a differentiation strategy through branding. Each year the Centre for Brand Analysis considers thousands of brands within both the B2B and B2C sectors. Brands do not apply or pay to be considered. The exhaustive list of brands is created from independent research, public nomination and consultation with an Expert Council. The final list of B2C “superbrands” is then ultimately determined by a national vote of more than 2,100 British adults. Similarly, the B2B list of “superbrands” is determined by the view of the Expert Council and 1,700 individual business professionals from across the UK.\footnote{Additional information on “Superbrands” can be found at the Superbrands (UK) Ltd website at www.superbrands.uk.com}

With respect to the sampling of this research, this classification of brands resulted in a total of 50 brands identified within the sample, equivalent to 99 brands at the transaction level. Of these, 37 and 13 brands were identified in the B2C and B2B sector respectively, accounting for 73 and 26 (branding) binary variables at the transaction level for the B2C and B2B sector respectively.
10.4.  Results and analysis

Table 33 shows the mean, standard deviation and Pearson’s correlations for the variables that are used for the following analysis. Reiterating the correlation figures of chapters 8 and 9, it can be observed that both socially and environmentally RPSM is strongly correlated to firm size, supplier location, industry- and transaction-specific characteristics.

It can also be observed that both LOWPRICE and INNOVATION strategies are strongly and positively correlated with firm size, whereas NICHE is negatively correlated with firm size. This reflects that LOWPRICE and INNOVATION strategies are business strategies that are associated with a mass market segment. Moreover, the correlation figures suggest that LOWPRICE firms are positively correlated with firms that procure socially impactful products and also environmentally impactful industries. In contrast INNOVATION strategies are negatively associated with firms that operate in and procure from a socially sensitive industry. Finally, a strong and positive relationship can be observed between INNOVATION and supplier development efforts.
Table 33 - Means, Standard Deviations and Inter-Correlations of Key Variables, Aggregated

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Socially RPSM performance</td>
</tr>
<tr>
<td>2</td>
<td>Environmentally impactful industry</td>
</tr>
<tr>
<td>3</td>
<td>Firm size</td>
</tr>
<tr>
<td>4</td>
<td>B2C binary</td>
</tr>
<tr>
<td>5</td>
<td>USA</td>
</tr>
<tr>
<td>6</td>
<td>West Europe</td>
</tr>
<tr>
<td>7</td>
<td>UK</td>
</tr>
<tr>
<td>8</td>
<td>China</td>
</tr>
<tr>
<td>9</td>
<td>South East Asia</td>
</tr>
<tr>
<td>10</td>
<td>Others</td>
</tr>
<tr>
<td>11</td>
<td>Service binary</td>
</tr>
<tr>
<td>12</td>
<td>Relationship length</td>
</tr>
<tr>
<td>13</td>
<td>Product complexity</td>
</tr>
<tr>
<td>14</td>
<td>Product improvement</td>
</tr>
<tr>
<td>15</td>
<td>Power Imbalance</td>
</tr>
<tr>
<td>16</td>
<td>Socially impactful product</td>
</tr>
<tr>
<td>17</td>
<td>Environmentally impactful product</td>
</tr>
<tr>
<td>18</td>
<td>Socially impactful industry</td>
</tr>
<tr>
<td>19</td>
<td>Environmentally impactful industry</td>
</tr>
<tr>
<td>20</td>
<td>Socially impactful product AND industry</td>
</tr>
<tr>
<td>21</td>
<td>Environmentally impactful product AND industry</td>
</tr>
<tr>
<td>22</td>
<td>Low Price Strategy</td>
</tr>
<tr>
<td>23</td>
<td>Innovative Strategy</td>
</tr>
<tr>
<td>24</td>
<td>Supplier Development</td>
</tr>
<tr>
<td>25</td>
<td>P&amp;D intensity</td>
</tr>
</tbody>
</table>

**: Correlation is significant at the 0.01 level (2-tailed).
*: Correlation is significant at the 0.05 level (2-tailed).
†: Based on secondary data.
### Table 34 - Regression Analysis, Business Strategy and RPSM, Aggregated, N=340

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
<td>Model 5</td>
<td>Model 6</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.438*</td>
<td>1.554***</td>
<td>0.424*</td>
<td>1.594***</td>
<td>0.541**</td>
<td>1.666***</td>
</tr>
<tr>
<td>(0.232)</td>
<td>(0.240)</td>
<td>(0.232)</td>
<td>(0.227)</td>
<td>(0.236)</td>
<td>(0.226)</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.135***</td>
<td>0.082***</td>
<td>0.139***</td>
<td>0.078***</td>
<td>0.131***</td>
<td>0.073***</td>
</tr>
<tr>
<td>(0.023)</td>
<td>(0.024)</td>
<td>(0.023)</td>
<td>(0.024)</td>
<td>(0.024)</td>
<td>(0.023)</td>
<td></td>
</tr>
<tr>
<td>Supplier location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>0.270</td>
<td>0.119</td>
<td>0.236</td>
<td>0.065</td>
<td>0.290</td>
<td>0.101</td>
</tr>
<tr>
<td>(0.179)</td>
<td>(0.168)</td>
<td>(0.179)</td>
<td>(0.169)</td>
<td>(0.175)</td>
<td>(0.168)</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Europe</td>
<td>-0.097</td>
<td>0.035</td>
<td>-1.01</td>
<td>0.043</td>
<td>-0.106</td>
<td>0.034</td>
</tr>
<tr>
<td>(0.131)</td>
<td>(0.130)</td>
<td>(0.123)</td>
<td>(0.123)</td>
<td>(0.127)</td>
<td>(0.121)</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>0.327</td>
<td>-0.595***</td>
<td>0.335</td>
<td>-0.582***</td>
<td>0.413**</td>
<td>-0.522***</td>
</tr>
<tr>
<td>(0.216)</td>
<td>(0.203)</td>
<td>(0.213)</td>
<td>(0.202)</td>
<td>(0.210)</td>
<td>(0.201)</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>1.081***</td>
<td>0.133</td>
<td>1.073***</td>
<td>0.110</td>
<td>0.992***</td>
<td>0.054</td>
</tr>
<tr>
<td>(0.160)</td>
<td>(0.148)</td>
<td>(0.158)</td>
<td>(0.148)</td>
<td>(0.156)</td>
<td>(0.148)</td>
<td></td>
</tr>
<tr>
<td>South East Asia</td>
<td>1.216***</td>
<td>-0.436**</td>
<td>1.153***</td>
<td>0.413**</td>
<td>1.161***</td>
<td>0.415**</td>
</tr>
<tr>
<td>(0.194)</td>
<td>(0.181)</td>
<td>(0.192)</td>
<td>(0.181)</td>
<td>(0.187)</td>
<td>(0.186)</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>0.403*</td>
<td>0.069</td>
<td>0.389*</td>
<td>0.053</td>
<td>0.368*</td>
<td>0.028</td>
</tr>
<tr>
<td>(0.213)</td>
<td>(0.195)</td>
<td>(0.210)</td>
<td>(0.195)</td>
<td>(0.206)</td>
<td>(0.193)</td>
<td></td>
</tr>
<tr>
<td>Transaction characterics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>0.044</td>
<td>0.001</td>
<td>0.030</td>
<td>0.002</td>
<td>0.018</td>
<td>-0.006</td>
</tr>
<tr>
<td>(0.047)</td>
<td>(0.044)</td>
<td>(0.044)</td>
<td>(0.044)</td>
<td>(0.045)</td>
<td>(0.043)</td>
<td></td>
</tr>
<tr>
<td>Service binary variable</td>
<td>0.050</td>
<td>0.006</td>
<td>0.055</td>
<td>0.018</td>
<td>0.100</td>
<td>0.048</td>
</tr>
<tr>
<td>(0.121)</td>
<td>(0.112)</td>
<td>(0.120)</td>
<td>(0.112)</td>
<td>(0.118)</td>
<td>(0.112)</td>
<td></td>
</tr>
<tr>
<td>Product complexity</td>
<td>0.023</td>
<td>0.059</td>
<td>0.017</td>
<td>0.042</td>
<td>0.002</td>
<td>0.038</td>
</tr>
<tr>
<td>(0.052)</td>
<td>(0.051)</td>
<td>(0.049)</td>
<td>(0.050)</td>
<td>(0.052)</td>
<td>(0.050)</td>
<td></td>
</tr>
<tr>
<td>Product importance</td>
<td>0.137***</td>
<td>0.088***</td>
<td>0.170***</td>
<td>0.106**</td>
<td>0.158***</td>
<td>0.094*</td>
</tr>
<tr>
<td>(0.053)</td>
<td>(0.053)</td>
<td>(0.053)</td>
<td>(0.050)</td>
<td>(0.052)</td>
<td>(0.050)</td>
<td></td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.100***</td>
<td>0.100***</td>
<td>0.100***</td>
<td>0.099***</td>
<td>0.102***</td>
<td>0.100***</td>
</tr>
<tr>
<td>(0.039)</td>
<td>(0.036)</td>
<td>(0.038)</td>
<td>(0.036)</td>
<td>(0.038)</td>
<td>(0.036)</td>
<td></td>
</tr>
<tr>
<td>Industry and product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B2C sector</td>
<td>0.331***</td>
<td>0.249***</td>
<td>0.327***</td>
<td>0.249***</td>
<td>0.310***</td>
<td>0.213**</td>
</tr>
<tr>
<td>(0.101)</td>
<td>(0.085)</td>
<td>(0.105)</td>
<td>(0.087)</td>
<td>(0.102)</td>
<td>(0.087)</td>
<td></td>
</tr>
<tr>
<td>Socially impactful product</td>
<td>0.167</td>
<td>0.191</td>
<td>0.191</td>
<td>0.191</td>
<td>0.191</td>
<td>0.191</td>
</tr>
<tr>
<td>(0.172)</td>
<td>(0.170)</td>
<td>(0.170)</td>
<td>(0.166)</td>
<td>(0.167)</td>
<td>(0.166)</td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful product</td>
<td>-0.077</td>
<td>-0.111</td>
<td>-0.111</td>
<td>-0.111</td>
<td>-0.111</td>
<td>-0.111</td>
</tr>
<tr>
<td>(0.128)</td>
<td>(0.129)</td>
<td>(0.129)</td>
<td>(0.128)</td>
<td>(0.128)</td>
<td>(0.128)</td>
<td></td>
</tr>
<tr>
<td>Socially impactful industries</td>
<td>0.126</td>
<td>0.173</td>
<td>0.173</td>
<td>0.173</td>
<td>0.173</td>
<td>0.173</td>
</tr>
<tr>
<td>(0.179)</td>
<td>(0.178)</td>
<td>(0.178)</td>
<td>(0.178)</td>
<td>(0.176)</td>
<td>(0.176)</td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful industries</td>
<td>-0.374***</td>
<td>-0.359***</td>
<td>-0.359***</td>
<td>-0.346***</td>
<td>-0.346***</td>
<td>-0.346***</td>
</tr>
<tr>
<td>(0.127)</td>
<td>(0.128)</td>
<td>(0.128)</td>
<td>(0.128)</td>
<td>(0.126)</td>
<td>(0.126)</td>
<td></td>
</tr>
<tr>
<td>Socially impactful product AND industries</td>
<td>0.670***</td>
<td>0.696***</td>
<td>0.598***</td>
<td>0.598***</td>
<td>0.598***</td>
<td>0.598***</td>
</tr>
<tr>
<td>(0.151)</td>
<td>(0.152)</td>
<td>(0.151)</td>
<td>(0.141)</td>
<td>(0.141)</td>
<td>(0.141)</td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful product AND industries</td>
<td>-0.058</td>
<td>-0.074</td>
<td>-0.074</td>
<td>-0.074</td>
<td>-0.074</td>
<td>-0.074</td>
</tr>
<tr>
<td>(0.142)</td>
<td>(0.142)</td>
<td>(0.142)</td>
<td>(0.142)</td>
<td>(0.142)</td>
<td>(0.142)</td>
<td></td>
</tr>
<tr>
<td>Business strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW PRICE (Cost leadership)</td>
<td>-0.137***</td>
<td>-0.034</td>
<td>-0.143***</td>
<td>-0.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.046)</td>
<td>(0.044)</td>
<td>(0.045)</td>
<td>(0.043)</td>
<td>(0.044)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INNOVATION</td>
<td>0.057</td>
<td>0.099**</td>
<td>0.070</td>
<td>0.057</td>
<td>0.065</td>
<td>0.043</td>
</tr>
<tr>
<td>(0.046)</td>
<td>(0.043)</td>
<td>(0.046)</td>
<td>(0.044)</td>
<td>(0.044)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NICHE</td>
<td>-0.061</td>
<td>0.008</td>
<td>-0.062*</td>
<td>-0.010</td>
<td>-0.062*</td>
<td>-0.010</td>
</tr>
<tr>
<td>(0.047)</td>
<td>(0.044)</td>
<td>(0.046)</td>
<td>(0.044)</td>
<td>(0.044)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply management &quot;philosophy&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier development programmes</td>
<td>0.184***</td>
<td>0.135***</td>
<td>0.184***</td>
<td>0.135***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(0.047)</td>
<td>(0.047)</td>
<td>(0.047)</td>
<td>(0.047)</td>
<td>(0.047)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ***p<0.01
- **p<0.05
- *p<0.10

Table 34 provides the first set of regression analyses, based on the entire sample, consisting of 178 firms and 340 buyer-supplier relationships.
Similarly to the regression analysis of chapters 8 and 9, models 1 and 2 provide the base models and show that firm size is positively influencing RPSM practices. Sourcing country, i.e. supplier location, is also a significant factor in shaping RPSM. For example, socially RPSM is profound when firms are purchasing from China and South East Asian countries. Environmentally RPSM however is strongly neglected when purchasing from India. RPSM is therefore predominantly something that is related to developing countries. In contrast, purchasing and supply transactions from developed countries, i.e. USA and Europe do not appear to have a strong effect on firms’ RPSM performance.

The significance of the purchased product/service and the relative buyer power are also important in influencing both socially and environmentally RPSM. Finally, the base model shows that firms that procure and operate in a socially sensitive industry are particularly proactive in terms of their social supply chain efforts, whereas firms that operate in an environmentally impactful industry strongly neglect environmental supply chain initiatives.

Models 3 and 4 show the impact of business strategy on RPSM. From model 3, it is apparent that LOWPRICE strategies negatively influence socially RPSM practices at the 1 percent significance level. Model 4 shows that INNOVATION is strongly, and positively, influencing environmentally RPSM at the 5 percent significance level. In order to develop the model further and to establish whether business strategy only influences RPSM because it influences a firm’s purchasing and supply management “philosophy”, models 5 and 6 include the proxy for such processes by incorporating “supplier development” efforts.

Models 5 and 6 show that supplier development is significantly influencing RPSM practices. By including this variable, the significance of the LOWPRICE and NICHE factors’ effect on socially RPSM increases, but their explanatory power remains relatively low, and still explains less of the variation in socially RPSM than the product importance and power imbalance variables. Nonetheless, in terms of socially RPSM practices, business strategy explains nearly as much of the variation of the dependent variables as the supplier development variable does.
By incorporating the supplier development variable into model 6, it can be seen that the significance of the INNOVATION variable falls. Hence, the regression analysis of table 34 suggests that INNOVATION only influences environmentally RPSM practices, due to the extent that it influences a firm’s purchasing and supply management “philosophy”. As such, environmentally RPSM practices are a part of firms’ supply management “philosophies” rather than being directly influenced by business strategy.

Tables 35 and 36 consider the regression analysis of table 34, but to the context of the B2C and B2B markets, respectively. Considering the results of these two sectors in turn, by starting with table 35 and the B2C sector it can be observed that firm size and supplier location effects are the main factors that influence RPSM in the base model(s) of models 7 and 8.

Models 9 and 10 include the business strategy variable. LOWPRICE is strongly and negatively influencing socially RPSM practices, whereas INNOVATION strongly and positively influences socially RPSM practices. In model 9, the business strategy variables account for approximately 6.4 percent of the variation of the R-squared. As such the business strategy variables are some of the key variables within the model that describe what drives socially RPSM. For example, the business strategy variables account for a larger variation in the R-squared compared to the industry variables, transaction variables and firm size, and it is in fact the second most significant group of variables to explain socially RPSM, after supplier location effects.

Similarly for model 10, INNOVATION is one of the single most important variables in shaping environmentally RPSM, and explains approximately 5.8 percent of the variation in environmentally RPSM.
Table 35 - Regression Analysis, Business Strategy and RPSM, Business-to-Consumer, N=177

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 7</td>
<td>Model 8</td>
<td>Model 9</td>
<td>Model 10</td>
<td>Model 11</td>
<td>Model 12</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.632*</td>
<td>1.942***</td>
<td>0.753**</td>
<td>2.123***</td>
<td>0.830**</td>
<td>2.123***</td>
</tr>
<tr>
<td></td>
<td>(0.360)</td>
<td>(0.309)</td>
<td>(0.247)</td>
<td>(0.310)</td>
<td>(0.342)</td>
<td>(0.311)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.159***</td>
<td>0.072**</td>
<td>0.143***</td>
<td>0.053**</td>
<td>0.137**</td>
<td>0.053**</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.029)</td>
<td>(0.034)</td>
<td>(0.030)</td>
<td>(0.033)</td>
<td>(0.030)</td>
</tr>
<tr>
<td>Supplier location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>0.111</td>
<td>0.016</td>
<td>-0.044</td>
<td>-0.180</td>
<td>-0.072</td>
<td>-0.180</td>
</tr>
<tr>
<td></td>
<td>(0.291)</td>
<td>(0.265)</td>
<td>(0.285)</td>
<td>(0.264)</td>
<td>(0.280)</td>
<td>(0.266)</td>
</tr>
<tr>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Europe</td>
<td>0.003</td>
<td>0.069</td>
<td>0.055</td>
<td>0.113</td>
<td>0.052</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td>(0.181)</td>
<td>(0.201)</td>
<td>(0.177)</td>
<td>(0.197)</td>
<td>(0.177)</td>
</tr>
<tr>
<td>India</td>
<td>0.075</td>
<td>-0.385</td>
<td>0.143</td>
<td>-0.386</td>
<td>0.130</td>
<td>-0.389</td>
</tr>
<tr>
<td></td>
<td>(0.324)</td>
<td>(0.283)</td>
<td>(0.300)</td>
<td>(0.275)</td>
<td>(0.303)</td>
<td>(0.276)</td>
</tr>
<tr>
<td>China</td>
<td>1.369***</td>
<td>0.302</td>
<td>1.106***</td>
<td>0.212</td>
<td>0.951**</td>
<td>0.214</td>
</tr>
<tr>
<td></td>
<td>(0.261)</td>
<td>(0.194)</td>
<td>(0.217)</td>
<td>(0.150)</td>
<td>(0.217)</td>
<td>(0.196)</td>
</tr>
<tr>
<td>South East Asia</td>
<td>1.369***</td>
<td>0.501**</td>
<td>1.274***</td>
<td>0.489**</td>
<td>1.297***</td>
<td>0.489**</td>
</tr>
<tr>
<td></td>
<td>(0.251)</td>
<td>(0.227)</td>
<td>(0.250)</td>
<td>(0.221)</td>
<td>(0.245)</td>
<td>(0.232)</td>
</tr>
<tr>
<td>Others</td>
<td>0.876***</td>
<td>0.450*</td>
<td>0.745***</td>
<td>0.404</td>
<td>0.697**</td>
<td>0.405</td>
</tr>
<tr>
<td></td>
<td>(0.296)</td>
<td>(0.252)</td>
<td>(0.285)</td>
<td>(0.247)</td>
<td>(0.280)</td>
<td>(0.249)</td>
</tr>
<tr>
<td>Transaction characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>-0.006</td>
<td>-0.020</td>
<td>-0.029</td>
<td>-0.021</td>
<td>-0.033</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(0.079)</td>
<td>(0.066)</td>
<td>(0.076)</td>
<td>(0.067)</td>
<td>(0.075)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Service binary variable</td>
<td>-0.236</td>
<td>-0.395**</td>
<td>-0.168</td>
<td>-0.309*</td>
<td>-0.056</td>
<td>-0.311**</td>
</tr>
<tr>
<td></td>
<td>(0.220)</td>
<td>(0.184)</td>
<td>(0.214)</td>
<td>(0.160)</td>
<td>(0.214)</td>
<td>(0.185)</td>
</tr>
<tr>
<td>Product complexity</td>
<td>0.047</td>
<td>0.087</td>
<td>0.033</td>
<td>0.042</td>
<td>0.011</td>
<td>0.043</td>
</tr>
<tr>
<td></td>
<td>(0.060)</td>
<td>(0.071)</td>
<td>(0.076)</td>
<td>(0.070)</td>
<td>(0.075)</td>
<td>(0.070)</td>
</tr>
<tr>
<td>Product importance</td>
<td>0.131</td>
<td>0.034</td>
<td>0.168**</td>
<td>0.085</td>
<td>0.183**</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>(0.081)</td>
<td>(0.070)</td>
<td>(0.076)</td>
<td>(0.070)</td>
<td>(0.077)</td>
<td>(0.070)</td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.086</td>
<td>0.102**</td>
<td>0.082</td>
<td>0.086</td>
<td>0.081</td>
<td>0.086</td>
</tr>
<tr>
<td></td>
<td>(0.062)</td>
<td>(0.054)</td>
<td>(0.059)</td>
<td>(0.052)</td>
<td>(0.058)</td>
<td>(0.052)</td>
</tr>
<tr>
<td>Industry and product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful product</td>
<td>0.264</td>
<td>0.312</td>
<td>0.273</td>
<td>0.273</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.260)</td>
<td>(0.255)</td>
<td>(0.250)</td>
<td>(0.250)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful product</td>
<td>0.217</td>
<td>0.106</td>
<td>0.217</td>
<td>0.106</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.213)</td>
<td>(0.212)</td>
<td>(0.213)</td>
<td>(0.213)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful industries</td>
<td>0.201</td>
<td>0.301</td>
<td>0.153</td>
<td>0.153</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.207)</td>
<td>(0.203)</td>
<td>(0.204)</td>
<td>(0.204)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful industries</td>
<td>-0.038***</td>
<td>-0.654***</td>
<td>-0.654***</td>
<td>-0.654***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.180)</td>
<td>(0.175)</td>
<td>(0.175)</td>
<td>(0.175)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful product AND industries</td>
<td>0.676***</td>
<td>0.805***</td>
<td>0.651***</td>
<td>0.651***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td>(0.181)</td>
<td>(0.181)</td>
<td>(0.181)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful product AND industries</td>
<td>0.071</td>
<td>0.154</td>
<td>0.071</td>
<td>0.154</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.198)</td>
<td>(0.198)</td>
<td>(0.198)</td>
<td>(0.198)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW PRICE (Cost leadership)</td>
<td>-0.180***</td>
<td>0.037</td>
<td>-0.194***</td>
<td>0.037</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.086)</td>
<td>(0.060)</td>
<td>(0.086)</td>
<td>(0.060)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INNOVATION</td>
<td>0.268***</td>
<td>0.213***</td>
<td>0.137***</td>
<td>0.214***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.070)</td>
<td>(0.050)</td>
<td>(0.074)</td>
<td>(0.050)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INCRE</td>
<td>-0.104</td>
<td>0.007</td>
<td>0.146***</td>
<td>0.009</td>
<td>0.146***</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.071)</td>
<td>(0.062)</td>
<td>(0.072)</td>
<td>(0.062)</td>
<td>(0.072)</td>
<td>(0.065)</td>
</tr>
<tr>
<td>Supply management &quot;philosophy&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier development programmes</td>
<td>0.239***</td>
<td>-0.004</td>
<td>0.239***</td>
<td>-0.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.085)</td>
<td>(0.073)</td>
<td>(0.085)</td>
<td>(0.073)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared 0.393 0.227 0.458 0.395 0.442 0.289
Adjusted R-squared 0.336 0.155 0.396 0.204 0.419 0.193

*p<0.10
**p<0.05
***p<0.01

The final models of the B2C analysis include the supplier development factor, which seeks to capture a firm’s purchasing and supply “philosophy”. Only in model 11, and in terms of socially RPSM, does supplier development appear to lead to improved socially RPSM performance. The significance of the business strategy variables also changes by including...
this variable. For example, it can be observed that both LOWPRICE and NICHE firms are neglecting their socially RPSM practices, whereas INNOVATIVE firms are relatively proactive, but this is partly because firms that pursue such a strategy have better supplier development programmes in place, and hence better purchasing and supply “philosophies”.

In model 12 it can be observed that supplier development efforts do not improve environmentally RPSM practices, and there is no significant change in the influence that business strategy has on environmentally RPSM practices either. As such, these results, which only focus on the B2C sector, differ significantly from the general firm, as discussed earlier. More specifically, in the B2C firm there is a much greater direct relationship between business strategy and relative RPSM performance, and the results suggest that firms that pursue a differentiation strategy either through innovation or branding, are much more proactive in terms of both their social and environmental practices. In particular, firms that pursue differentiation strategies through branding have relatively better socially RPSM in place, and firms that pursue differentiation through innovation strategies engage more actively in environmentally RPSM practices.

Moving on to table 36, which replicates the regressions of table 35 but to the context of the B2B market, it is again observed that firm size, sourcing country, and transaction-specific characteristics influence RPSM. The business strategy variables of LOWPRICE, INNOVATION and NICHE has been added to models 15 and 16, but does not influence the results of the base models (models 13 and 14). Therefore, there is little evidence to suggest that business strategy influences RPSM in the B2B sector. The final two models of table 36 include the supplier development variable. Although this is an important variable in shaping both socially and environmentally RPSM, it does not change the (lack of) impact of business strategy on either socially or environmentally RPSM.
Table 36 - Regression Analysis, Business Strategy and RPSM, Business-to-Business, N=163

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
<th>Socially RPSM performance</th>
<th>Environmentally RPSM performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 13</td>
<td>Model 14</td>
<td>Model 15</td>
<td>Model 16</td>
<td>Model 17</td>
<td>Model 18</td>
</tr>
<tr>
<td>Independent variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.724***</td>
<td>1.153***</td>
<td>0.665**</td>
<td>0.972***</td>
<td>0.855***</td>
<td>1.139***</td>
</tr>
<tr>
<td></td>
<td>(0.298)</td>
<td>(0.308)</td>
<td>(0.322)</td>
<td>(0.322)</td>
<td>(0.321)</td>
<td>(0.323)</td>
</tr>
<tr>
<td>Firm size</td>
<td>0.088***</td>
<td>0.128***</td>
<td>0.107***</td>
<td>0.195***</td>
<td>0.889**</td>
<td>0.133***</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.034)</td>
<td>(0.035)</td>
<td>(0.036)</td>
<td>(0.035)</td>
<td>(0.035)</td>
</tr>
<tr>
<td>Supplier location</td>
<td>USA</td>
<td>0.411*</td>
<td>0.079</td>
<td>0.422*</td>
<td>0.075</td>
<td>0.490**</td>
</tr>
<tr>
<td></td>
<td>(0.213)</td>
<td>(0.215)</td>
<td>(0.215)</td>
<td>(0.216)</td>
<td>(0.211)</td>
<td>(0.214)</td>
</tr>
<tr>
<td></td>
<td>UK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>West Europe</td>
<td>-0.174</td>
<td>-0.070</td>
<td>-0.168</td>
<td>-0.094</td>
<td>-0.183</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.157)</td>
<td>(0.163)</td>
<td>(0.158)</td>
<td>(0.163)</td>
<td>(0.154)</td>
</tr>
<tr>
<td></td>
<td>India</td>
<td>0.749***</td>
<td>-0.731**</td>
<td>0.719**</td>
<td>-0.707***</td>
<td>0.894***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.279)</td>
<td>(0.291)</td>
<td>(0.282)</td>
<td>(0.291)</td>
<td>(0.282)</td>
</tr>
<tr>
<td></td>
<td>China</td>
<td>0.890***</td>
<td>-0.210</td>
<td>0.945***</td>
<td>-0.211</td>
<td>0.967***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.231)</td>
<td>(0.237)</td>
<td>(0.235)</td>
<td>(0.239)</td>
<td>(0.239)</td>
</tr>
<tr>
<td></td>
<td>South-East Asia</td>
<td>0.864***</td>
<td>0.404</td>
<td>0.890***</td>
<td>0.437</td>
<td>0.632***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.297)</td>
<td>(0.306)</td>
<td>(0.301)</td>
<td>(0.308)</td>
<td>(0.304)</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>-0.137</td>
<td>-0.520*</td>
<td>-0.163</td>
<td>-0.508*</td>
<td>-0.149</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.304)</td>
<td>(0.304)</td>
<td>(0.306)</td>
<td>(0.304)</td>
<td>(0.299)</td>
</tr>
<tr>
<td>Transaction characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship length</td>
<td>0.068</td>
<td>0.015</td>
<td>0.057</td>
<td>0.008</td>
<td>0.049</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.055)</td>
<td>(0.054)</td>
<td>(0.055)</td>
<td>(0.053)</td>
<td>(0.055)</td>
</tr>
<tr>
<td>Service binary variable</td>
<td></td>
<td>0.214</td>
<td>0.201</td>
<td>0.217</td>
<td>0.163</td>
<td>0.224*</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
<td>(0.138)</td>
<td>(0.136)</td>
<td>(0.130)</td>
<td>(0.130)</td>
<td>(0.130)</td>
</tr>
<tr>
<td>Product complexity</td>
<td>-0.030</td>
<td>0.029</td>
<td>-0.016</td>
<td>0.039</td>
<td>-0.228</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.067)</td>
<td>(0.066)</td>
<td>(0.069)</td>
<td>(0.065)</td>
<td>(0.067)</td>
</tr>
<tr>
<td>Product importance</td>
<td>0.152**</td>
<td>0.146**</td>
<td>0.194***</td>
<td>0.176**</td>
<td>0.113</td>
<td>0.137*</td>
</tr>
<tr>
<td></td>
<td>(0.065)</td>
<td>(0.067)</td>
<td>(0.069)</td>
<td>(0.071)</td>
<td>(0.069)</td>
<td>(0.071)</td>
</tr>
<tr>
<td>Power imbalance</td>
<td>0.107*</td>
<td>0.083*</td>
<td>0.167**</td>
<td>0.089*</td>
<td>0.110**</td>
<td>0.094*</td>
</tr>
<tr>
<td></td>
<td>(0.048)</td>
<td>(0.048)</td>
<td>(0.049)</td>
<td>(0.046)</td>
<td>(0.048)</td>
<td>(0.048)</td>
</tr>
<tr>
<td>Industry and product</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially impactful product</td>
<td>0.032</td>
<td>0.070</td>
<td>0.071</td>
<td>0.071</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.219)</td>
<td>(0.224)</td>
<td>(0.224)</td>
<td>(0.218)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful product</td>
<td></td>
<td>-0.195</td>
<td>-0.217</td>
<td>-0.217</td>
<td>-0.209</td>
<td>-0.209</td>
</tr>
<tr>
<td></td>
<td>(0.160)</td>
<td>(0.164)</td>
<td>(0.164)</td>
<td>(0.164)</td>
<td>(0.161)</td>
<td>(0.161)</td>
</tr>
<tr>
<td>Socially impactful industries</td>
<td>0.615</td>
<td>0.582</td>
<td>0.277</td>
<td>0.277</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.714)</td>
<td>(0.718)</td>
<td>(0.724)</td>
<td>(0.724)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmentally impactful industries</td>
<td></td>
<td>-0.169</td>
<td>-0.167</td>
<td>-0.167</td>
<td>-0.167</td>
<td>-0.167</td>
</tr>
<tr>
<td></td>
<td>(0.178)</td>
<td>(0.179)</td>
<td>(0.179)</td>
<td>(0.179)</td>
<td>(0.176)</td>
<td>(0.176)</td>
</tr>
<tr>
<td>Socially impactfully product AND industries</td>
<td>-0.297</td>
<td>-0.167</td>
<td>-0.167</td>
<td>-0.179</td>
<td>-0.177</td>
<td>-0.177</td>
</tr>
<tr>
<td></td>
<td>(0.445)</td>
<td>(0.470)</td>
<td>(0.470)</td>
<td>(0.458)</td>
<td>(0.458)</td>
<td>(0.458)</td>
</tr>
<tr>
<td>Environmentally impactfully product AND industries</td>
<td>0.125</td>
<td>0.140</td>
<td>-0.140</td>
<td>-0.140</td>
<td>0.125</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.205)</td>
<td>(0.205)</td>
<td>(0.205)</td>
<td>(0.205)</td>
<td>(0.205)</td>
<td></td>
</tr>
<tr>
<td>Business strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOW PRICE (Cost leadership)</td>
<td></td>
<td>-0.006</td>
<td>-0.086</td>
<td>-0.003</td>
<td>-0.084</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.064)</td>
<td>(0.065)</td>
<td>(0.065)</td>
<td>(0.065)</td>
<td>(0.064)</td>
<td></td>
</tr>
<tr>
<td>INNOVATION</td>
<td>-0.71</td>
<td>-0.095</td>
<td>-0.083</td>
<td>-0.106*</td>
<td>0.081</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.062)</td>
<td>(0.062)</td>
<td>(0.061)</td>
<td>(0.061)</td>
<td>(0.061)</td>
<td></td>
</tr>
<tr>
<td>NICHE</td>
<td>-0.243</td>
<td>-0.033</td>
<td>-0.046</td>
<td>0.008</td>
<td>-0.069</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.059)</td>
<td>(0.061)</td>
<td>(0.056)</td>
<td>(0.056)</td>
<td>(0.060)</td>
<td></td>
</tr>
<tr>
<td>Supply management philosophy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier development programmes</td>
<td>0.105**</td>
<td></td>
<td></td>
<td>0.139**</td>
<td>0.054</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td></td>
<td></td>
<td>(0.055)</td>
<td>(0.055)</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.308</td>
<td>0.199</td>
<td>0.316</td>
<td>0.222</td>
<td>0.253</td>
<td>0.255</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.237</td>
<td>0.117</td>
<td>0.231</td>
<td>0.125</td>
<td>0.268</td>
<td>0.153</td>
</tr>
</tbody>
</table>

***p<0.01  **p<0.05  *p<0.10

To summarise these regressions, the findings have shown that for the typical, or “average”, firm, INNOVATION is a strong predictor of environmentally RPSM, predominantly because it influences a firm’s supply management processes. For the firms in general it was also observed that LOWPRICE and NICHE strategies lead to relatively neglected socially RPSM practices.
In the context of the B2C sector, the findings showed that both LOWPRICE and INNOVATION influence socially RPSM. LOWPRICE strategy significantly reduces the engagement with socially RPSM, whereas INNOVATION slightly increased engagement with socially RPSM, but predominately because it influenced the propensity to develop suppliers. INNOVATION also had a strong and positive direct impact on environmentally RPSM, which was not caused by its influence on supply management “philosophy”.

Further, the regression analysis did not indicate that business strategy had an effect on RPSM in the B2B sector.

In order to complement the above results, which are based on primary data, the results of table 37 are offered which combine the primary data with secondary data that seek to capture elements pertaining to specific business strategies.

As can be observed from models 19-24, these results largely mirror the findings above. At the aggregate level and in the B2C sector, it is observed that branding is a significant factor in shaping both socially and environmentally RPSM practices. There is, however, little evidence to suggest that R&D intensity is associated with relatively good RPSM practices which were observed in the findings above. Only at the 20 percent significance level is R&D intensity a significant factor in shaping environmentally RPSM practices in the B2C sector. Both branding and R&D, however, remain insignificant in the B2B sector.
Overall, the results of table 37, therefore, offer strong confirmation of the conclusion to the results of tables 34, 35 and 36.
10.5. Discussion and conclusion

This study has considered the relationship between business strategy and RPSM, while also accounting for the relationship between RPSM and firms’ general supply development efforts.

Support was found for hypothesis 1 in that the findings showed that a LOWPRICE strategy is related to relatively poor RPSM practices, in particular socially RPSM. Support was also found for hypothesis 2, in that an INNOVATION strategy had a strong and positive impact on RPSM, partly due to its influence on supplier development efforts. Nonetheless, a direct relationship between INNOVATION and RPSM was found in the B2C sector. Due to the construction of LOWPRICE, the results also suggest that firms that pursue differentiation strategies, through high-quality product offers, engage actively in socially RPSM. Finally, support was found for hypothesis 4, as business strategy only appeared to have a role for the “average” firm and, in particular, for the B2C sector. However, considering only the business strategy and RPSM relationship in the context of the B2B sector, no relationship was found. It therefore suggests that RPSM is only a strategic issue in the B2C sector, and not in the B2B sector. The key findings of this study can therefore be summarised as follows:

- Conceptually and empirically business strategy can be related with responsible purchasing and supply management practices.
- Firms that focus on costs and low prices strongly neglect their social responsibilities in the context of their purchasing and supply chain activities, in particular in the B2C sector.
- Innovative firms tend to engage more actively in developing suppliers, which in turn improves environmentally responsible purchasing and supply management engagement.
- Firms pursuing differentiation strategies in the B2C sector, whether through innovation or branding, have relatively high engagement with socially and
environmentally responsible purchasing and supply management practices in the B2C sector.

- Business strategies seem only to influence responsible purchasing and supply management engagement in the B2C sector. In contrast, no significant relationship was found in the B2C sector.

Postponing a full account of the limitations and avenues for future research to the final chapter, the main issues pertaining to this particular study relate to causality test through the use of longitudinal data, and broader analysis of how business strategy, and which strategic factors, influence RPSM engagement.

In conclusion to this chapter, recent research has shown that purchasing and supply chain activities are closely related to a firm’s business strategy. This research has extended this relationship by considering how business strategy influences socially and environmentally responsible purchasing and supply initiatives in buyer-supplier relationships. The findings revealed that firms that pursue differentiation, through innovation, strategies engage much more actively in environmental purchasing practices. In contrast, firms pursuing a low-cost strategy, which is a close reverse proxy to differentiation, through quality strategies, grossly neglect their social responsibilities in the supply chain. However, responsible purchasing and supply practices only appear to be aligned with business strategy in the B2C sector. In contrast, firms in the B2B sector do not appear to align its RPSM strategies with those of their business strategy, and as such may miss an opportunity to gain a competitive advantage, and lose contracts from B2C firms.

In terms of the conceptual framework from chapter 4, this research finds support for propositions 1b, 1c, 2 and 4. As such, this study offers new insights into the engagement of RPSM, and overall finds strong support for the latter half of the framework, which suggests that business strategy does indeed matter in shaping both social and environmental purchasing and supply management activities.
CHAPTER 11
11. INDUSTRY ENVIRONMENT, FINANCIAL RESOURCES, BUSINESS STRATEGY AND RESPONSIBLE PURCHASING AND SUPPLY MANAGEMENT: A PATH ANALYSIS

11.1. Introduction

Whereas the preceding empirical chapters have sought to highlight and examine individual elements of the conceptual framework developed in chapter 4, this chapter seeks to test the full model, in which RPSM is a function of the firm’s supply management “philosophy”, its business strategy, its financial resources and ultimately its industry environment.

As presented in figure 25, in its simplest form, the framework in chapter 4 proposed that RPSM is a function of the firm’s general purchasing and supply chain processes. Furthermore, consistent with existing research (e.g. Cousins, 2005), it was argued that a firm’s general purchasing and supply processes were influenced by its business strategy. Business strategy, in turn, was suggested to be a function of both financial resources (Nohria and Gulati, 1996), and the industry environment (Porter, 1980). Finally, financial resources were also argued to be a function of the industry environment (Dess and Beard, 1984), where industry environments that are considered as having the characteristics of competitiveness and uncertainty are often associated with relatively low profit margins and low levels of organisational slack. The framework of figure 25 is similar in nature to a number of purchasing and supply chain models, which suggests that it is the industry environment and business strategy that shape these practices (e.g. Zou and Cavusgil, 1996; Narasimhan et al., 2006; Rajagopan and Bernard, 1994). Nonetheless, a fundamental difference from these models and the conceptual work of Van De Ven and Jeurissen (2005) and Sethi and Sama (1998), is that financial resources are explicitly included in the framework of figure 25, rather than being treated as an implicit variable as is the case with many of the discussed scholars.
In examining figure 25 and the conceptual framework of chapter 4, part of this research will inherently replicate previous studies which have examined the relationship between industry environments, resources and business strategy (Miller, 1988; Pelham, 1999; Tan and Litschert, 1994). Nevertheless, this research will also, in line with such work as Ward et al. (1995, 1996) and Ward and Duray (2000), extend the classical environment-resource-strategy perspective by examining how these components, which are significant factors in shaping a firm’s success, influence their RPSM practices.

As this chapter empirically assesses the complete framework, it offer a more comprehensive explanation of the exact role of the industry environment, and also the extent to which RPSM is driven by strategic (business strategy) or discretionary (financial resources) motives. In so doing, this chapter seeks to answer the following questions: “what is the relationship between industry environments, financial resources, business strategy and a firm’s responsible purchasing and supply management practices”; and “to what extent is RPSM an issue of strategy or discretionary spending?”

The structure of this chapter is as follows: first, a set of hypotheses relating to the conceptual framework and propositions developed in chapter 4 will be made. Second, details of the methodology and key variables used in this research will be presented. Third, the results and analysis of the structural equation models (SEM) that seek to explore figure 25 will be given. Finally, this chapter will conclude by considering the implications of the findings for practitioners and future research in this field.
11.2. Theory and hypothesis development

As noted, the existing strategy literature has acknowledged how industry environment influences both financial performance and business strategy. There has been substantial conceptual and empirical research on the relationship and interactions of the firm’s industry environment and its strategy and performance (e.g. Cyert and March, 1963; Dess and Beard, 1984; Ward et al., 1997). Nevertheless, it has been argued that the industry environment only influences business strategy because it affects financial resources (Aldrich, 1979; Dess and Beard, 1984). For example, Aldrich (1979, p. 61, see also Dess and Beard, 1984, p. 52) noted that “…environments affect organizations through the process of making available or withholding resources, and organizational forms can be ranked in terms of their efficacy in obtaining resources”. The environment-strategy literature, however, either often ignores the link between industry environment and subsequent business strategy, or implicitly assumes that industry environment influences resources, which in turn influence business strategy (Miller, 1988) and CSR strategy (Husted and Allen, 2001; Van de Ven and Jeurissen, 2005).

11.2.1. Industry environment

The first two hypotheses that will be developed herein relate to propositions 1a and 3a, and hence focus on the role that the industry environment has on socially and environmentally responsible business engagement through its impact on business strategy and financial resources. As these relationships have already been discussed in chapters 4 and 8, the author will keep the following discussion relatively brief.

The nature of the relationship between industry environment, business strategy and subsequent responsible behaviour is somewhat mixed according to the existing literature. For example, Campbell (2007) argues that competition influences business strategy and the importance of differentiation, which in turn influence CSR practices. This line of thought suggests that CSR is a signal of unobservable qualities (Fisman et al., 2007). When competition is virtually zero, and the unit of analysis is a monopoly, there are no incentives to engage in CSR practices (Campbell, 2007). However, under perfect competitive markets, differentiation plays an insignificant role and hence does not provide any
incentives for differentiation through CSR either (Campbell, 2007). Fernandes-Kranz and Santato (2007) take a slightly different view, and suggest that when CSR is used as a part of the business strategy, then such practices will be positively associated with the intensity of the product market competition. In contrast, if such practices are motivated by altruistic motives, then such practices should be negatively correlated with the competition, as it is then depending on financial resources, rather than used as a signalling and differentiation tool.

Van de Ven and Jeurissen (2005) make the link between industry environment, business strategy and CSR engagement even more explicit. For example, they argue that fierce competition leads to a dominant strategy of low-cost, where firms cannot afford to invest in CSR, as this would lead to higher costs than competitors, and ultimately to the loss of competitive advantage. There is therefore “no financial room to bear costs that are structurally higher than those of competitors” (Van de Ven and Jeurissen, 2005, p. 306). In less competitive environments however the dominant strategy is differentiation, and firms are not as financially constrained as in highly competitive markets. A combination of these factors causes firms in less competitive environments to engage proactively in CSR strategies to differentiate their product and enhance their reputation.

Reflecting this discussion and relating it back to the conceptual framework of chapter 4 and proposition 1a it is hypothesised that:

*Hypothesis 1a: Industry environment indirectly influences RPSM through its influence on business strategy.*

Nonetheless, as also hinted by the aforementioned authors (e.g. Campbell, 2007; Van de Ven and Jeurissen, 2005), industry environment also has a significant role in shaping financial resources, which in turn is a major barrier and driver of CSR and RPSM engagement. Existing research has emphasised a firm’s economic responsibilities when competition is intense and when its financial performance is weak (Campbell, 2007; Waddock and Graves, 1997). As such, CSR engagement is more likely to take place when the industry environment is such that it does not threatens the survival and profitability of the firm, and only when the industry environment allows firms to obtain strong profit margins will they be willing to invest in social and environmental practices (Campbell,
2007). These arguments are consistent with Sethi and Sama (1998, p. 89) who acknowledge that in competitive environments firms “strive for productivity and allocative efficiency”. Under such circumstances firms have few discretionary resources and no option to conduct beyond what the market would dictate.

Given these arguments, it is hypothesised that:

**Hypothesis 1b:** Industry environment indirectly influences RPSM through its influence on financial resources.

Having developed the indirect role of industry environment in shaping RPSM engagement, the following text considers the direct role of financial resources and business strategy, respectively. In this context it should be noted that although scholars have suggested that the industry environment influences CSR and RPSM practices in different ways, as stipulated in hypotheses 1a and 1b, researchers often implicitly relates financial resources with business strategy. This study, however, extent this debate, both conceptually and empirically, by making the relationship between financial resources and business strategy explicit.

### 11.2.2. Financial resources (organisational slack)

As noted in the above discussion, and in line with proposition 3a, financial resources have arguably a significant role in shaping socially and environmentally responsible practices. Indeed, as acknowledged not only in the conceptual framework but also in chapter 9, financial resources have been found to be a major barrier to successful implementation of both CSR (Seifert et al., 2004; Waddock and Graves, 1997) and RPSM (Min and Galle, 1997; Murphy and Poist, 1995; Walker et al., 2008). Therefore, consistent with proposition 3b, it is hypothesised that:

**Hypothesis 2a:** Financial resources, in terms of organisational slack, directly influence responsible purchasing and supply management practices.
Nevertheless, there is also a body of literature that suggests that financial resources influence a firm’s business strategy and its strategic behaviour (Daniel et al., 2004; Hambrick et al., 1996; Moses, 1992; Smith et al., 1991). Therefore, financial resources may only indirectly influence RPSM because they influence a firm’s business strategy, which in turn influences its use of CSR and RPSM to differentiate the product. Hence, consistent with proposition 3c, it is hypothesised that:

\textit{Hypothesis 2b: Financial resources, in terms of organisational slack, influence RPSM indirectly, through its influence on firms’ business strategy.}

\subsection*{11.2.3. Business strategy}

Burke and Logsdon (1996) and Porter and Kramer (2006) both argue that if CSR is to improve a firm’s performance, then such practices must be integrated and aligned with the overall strategy of the firm. Following the arguments of chapter 10, the literature has revealed that CSR can have a central role in improving the firm’s reputation (Brammer and Pavelin, 2004; Branco and Rodrigues, 2006), differentiating the firm and its products (McWilliams and Siegel, 2001; Siegel and Vitaliano, 2007), encouraging consumer trial and purchase (Becker-Olsen et al., 2006; Mohr et al., 2001) and reducing exposure to risk (Phillips and Caldwell, 2005). Thus, in line with proposition 1b of chapter 4, it is hypothesised that:

\textit{Hypothesis 3a: Business strategy directly influences responsible purchasing and supply management practices.}

Nevertheless, as acknowledged earlier, business strategy also influences a firm’s more general purchasing and supply chain processes (Baier et al., 2008; Cousins, 2005; González-Benito, 2007; Knudsen, 2003; Narasimhan and Carter, 1998). Therefore, business strategy may not have a direct effect on RPSM but rather an indirect effect because it influences a firm’s general purchasing and supply management processes and “philosophy”. Any relationship between business strategy and RPSM may therefore be due to the following hypotheses:
Hypothesis 3b: Business strategy indirectly influences RPSM, through the influence on purchasing and supply management “philosophy”, as captured by supplier development

11.2.4. Purchasing and supply development processes and “philosophy”

In line with the arguments of the preceding chapters, the literature has suggested that RPSM is a product of a firm’s general supply management “philosophy”. Furthermore, existing research has shown that supplier investment and readiness are important in promoting RPSM (Carter and Carter, 1998; Zhu and Sarkis, 2006), therefore:

Hypothesis 4: General purchasing and supply management processes, in terms of supplier development efforts, directly influence responsible purchasing and supply management practices.

This chapter does not propose any relationship between industry environment and supply management “philosophy”, or indeed financial slack and supply management “philosophy”, as these relationships will be explored through the modification indices of the structural equation modelling.

11.2.5. Target market

Finally, it is argued that, in line with the previous empirical chapters, firms serving a B2C market, in contrast to a B2B market, have relatively strong strategic incentives to engage in CSR and RPSM, therefore:

Hypothesis 5: The relationship between industry environment, organisational slack, business strategy, purchasing and supply chain “philosophy” and responsible purchasing and management practices dependent on the target market.
Having developed a set of hypotheses that reflect the literature and the hypotheses of the previous empirical chapters, along with the proposition offered in chapter 4, the following chapter will describe the methodology and empirical approach, which differ significantly from the previous chapters.

11.3. Methodology and data

In addition to the methodological approach to capturing socially and environmentally responsible purchasing and supply management practices, this research uses a set of secondary data sources to assess the conceptual framework and to assess the extent to which CSR in the purchasing and supply chain function is an integrated part of firms’ business strategy. This section will therefore give an overview of the key variables, in addition to the RPSM variable, which have been discussed at length and have been used for this research.

11.3.1. Key variables

*Industry environment:* Characteristics of the industry environment are often dynamic elements, as they evolve over time, depending both on the number of firms entering/exiting the industry, and on the tactics and strategies of each firm within the industry. In chapter 8, industry environment was defined in terms of the industry life cycle, which has been argued to be central to a firm’s business strategy (Baum and McGahan, 2004; Hofer, 1975). The traditional structure-conduct-performance (SCP) model stresses the factor of competition in shaping organisational behaviour and performance (Delorme et al, 2003). The SCP model is based on classical economic theory, where competition (i.e. concentration ratio) in an industry almost exclusively influences a firm’s conduct. In highly competitive environments, firms produce homogeneous products and have little influence over their pricing strategies. In contrast, in less competitive environments firms have more freedom in choosing their strategies and tactics to maximise performance (Delorme et al., 2003). Concentration ratios are calculated as the sum of the percentage market share of the top \( n \) firms. Nevertheless, there is no consensus on the appropriate \( n \) number. The main problem is the lack of data. In the UK, there are no estimates of market competition. Concentration ratios are not available in the public domain and there are no
census data that report concentration ratio on a regular basis. One possible solution to this is by establishing the market share of the top 4-5 firms with each industry, based on annual turnover figures from FAME. This approach, however, is very crude, and assumes that all firms of the industry are included in the FAME database.

Whereas the SCP model has been relatively vague in assessing factors beyond industry concentration ratios, Porter’s (1979) framework offers a more specific view of the factors that influence industry competition. Porter argues that industry competition and industry attractiveness are influenced by the power of buyer and suppliers; threats of entrants; substitutes; and rivalry within the industry. Nevertheless, similar to concentration ratio measures, Porter’s Five Forces have similar implications for empirical testing, as there is a significant lack of data concerning these forces. Furthermore there is no consensus as to how to capture the market forces. MarketLine\textsuperscript{18} does however shed some light on this issue. It provides analysis on 179 industries, and in its analysis it assesses the competitive forces of each industry. Marketline, however, does not report Porter’s Five Forces statistics for all industries, and only covers approximately half of all the industries\textsuperscript{19} that were present in the sample for this research.

A final common assessment of the industry environment is Dess and Beard’s (1984) dimensions of the task environment, which comprise: munificence, dynamism and complexity. A number of researchers have used these environmental dimensions in both conceptual and empirical work (e.g. Boyd and Gove, 2006; Castrogiovanni, 1991, 2002; Oliver, 1997; Tan and Litschert, 1994; Ward et al., 1995).

Munificence is a concept that seeks to understand the market capacity and ability to support sustained growth (Castrogiovanni, 2002; Starbuck, 1976; Aldrich, 1979). Munificence is often considered to influence firms’ resources, particularly financial resources. For example, Cyert and March (1963) argue that “growth and stability” allow a firm to generate organisational slack (Dess and Beard, 1984, p. 55). Castrogiovanni (1991, p. 542) argues that munificence: “is the scarcity or abundance of critical resources needed by (one or more) firms operating within an environment. […] The resources available

\textsuperscript{18} Also known as DATAMONITOR

\textsuperscript{19} Industries at the 2-digit SIC level
within an environment influence the survival and growth of firms sharing that
environment; they also affect the abilities of new firms to enter this environment” (see also
Randolph and Dess, 1984). Castrogiovanni (1991) notes that a firm’s strategy and
organisational options are highly dependent on the level of industry munificence. For
example, Shelton (2005) argues that firm survival rates are a positive function of
munificence. DiTienne et al. (2008) found that even underperforming firms are likely to
stay in an industry if it is characterised as munificent, and Ghobadian et al. (2009) found
that formal strategic planning was associated with a low munificent environment.

A further dimension of the task environment as defined by Dess and Beard (1984) is
industry dynamism. Dynamism is a construct which “…manifest in the degree of
instability or turbulence of such key operating concerns as market and industry conditions
as well as more general technological, economic, social, and political forces” (Miles et al.,
2000, p. 63). Dynamism is therefore a measurement of absence of pattern and of
unpredictability in the industry (Dess and Beard, 1984). Within dynamic industries
uncertainty is high and the market is turbulent; this in turn causes firms to have more
formal strategic planning processes in place (Ghobadian et al., 2009). Dynamic
environments also appear to promote organic structures, and significantly shape a firm’s
strategic posture (Dess and Beard, 1984). For example, firms operating in dynamic
environments tend to have greater long-term financial orientation, greater innovation,
greater industry awareness, greater emphasis on product quality, and greater levels of
aggressiveness and entrepreneurship (Miles et al., 2000).

The final dimension of Dess and Beard’s task environment (1984) is environmental
complexity. Environmental complexity captures the heterogeneity and range of
organisational activities (Child, 1972, p. 3; 2002). More complex environments “will
perceive greater uncertainty and have greater information-processing requirements” (Dess
and Beard, 1984, p. 56). The level of uncertainty and complexity within an industry may
also change organisational structure as the industries that require multiple inputs and
output channels need greater interaction with down-stream and up-stream suppliers (Dess
and Beard, 1984). Complex environments are therefore associated with complex linkage
requirements (Doz and Hamel, 1998), organisational frictions (Allmendinger and
Hackman, 1996), and greater internal and external organisational demands, which in turn
are “hazardous for organizations” (in Anderson and Tushman, 2001, p. 691).
This research makes use of the task environmental dimensions as identified by Dess and Beard (1984) as they have been used in previous empirical research into CSR (Goll and Rasheed, 2004; Husted and Allen, 2007), and data to capture the three dimensions which are available in the public domain.

Based on data from the Annual Business Inquiry (ABI) Survey, this research constructs the three dimensions of market environment, and in essence re-tests to the context of this sample the three hypotheses of Dess and Beard (1984, p. 57): (1) Organisational task environments will vary in terms of their munificence, and environmental capacity variables will load on a common factor; (2) Organisational task environments will vary in terms of their complexity, and homogeneity-heterogeneity and concentration dispersion variables will load on one common factor; (3) Organisational task environments will vary in terms of dynamism, and stability-instability and turbulence variables will load on one common factor.

The ABI samples approximately 78,000 businesses each year. The sample is stratified by industry and it gives the most comprehensive coverage of UK businesses and industry details. Its major implication however is that it does not survey the finance industry, i.e. SIC 60-69. In addition, this study uses data from the UK Supply and Use database, more specifically data from the Input-Output database, to compute complexity.

Table 38 outlines the variables that were used to measure the three dimensions of the industry/task environment.
### Table 38 - Industry Environment Dimensions and Measurements

<table>
<thead>
<tr>
<th>Industry Variable</th>
<th>Measurement Scale</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1. Growth in sales</td>
<td>Value of turnover; regression slope coefficient, divided by mean; 2004-2007</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V2. Growth in total employment</td>
<td>Total employment; same measurement procedures as V1.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V3. Growth in value added</td>
<td>Value added; same measurement procedures as V1.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V4. Growth in number of establishments</td>
<td>Total number of establishments, same measurement procedures as V1.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V5. Instability in total sales</td>
<td>Value of turnover; standard error of the regression slope coefficient divided by the mean value 2004-2007</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V6. Instability in total employment</td>
<td>Total employment; same measurement procedures as V5.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V7. Instability in value added</td>
<td>Value added; same measurement procedures as V5.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V8. Instability in total number of establishments</td>
<td>Total number of establishments, same measurement procedures as V5.</td>
<td>UK Annual Business Inquiry</td>
</tr>
<tr>
<td>V9. Concentration of inputs</td>
<td>$C_i = \frac{\sum_i^n I_i^2}{(\sum_i^n I_i)^2}$</td>
<td>UK Input-Output database (Supply and Use)</td>
</tr>
<tr>
<td>V10. Specialisation ratio</td>
<td>Ratio of primary output to total output for the industry</td>
<td>UK Input-Output database (Supply and Use)</td>
</tr>
<tr>
<td>V11. Concentration of outputs</td>
<td>$C_i = \frac{\sum_j^m O_j^2}{(\sum_j^m O_j)^2}$</td>
<td>UK Input-Output database (Supply and Use)</td>
</tr>
</tbody>
</table>

(A Adapted from Dess and Beard, 1984)

A factor analysis, table 39, of the measurements in table 38 confirms the findings of Dess and Beard (1984) and hence there are at least three distinctly different dimensions to the industry environment.
Table 39 - Factor Analysis: Munificence, Dynamism, and Complexity

<table>
<thead>
<tr>
<th>Industry variables</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Munificence</td>
<td>Dynamism</td>
<td>Complexity</td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (V1)</td>
<td>.886</td>
<td>-.121</td>
<td>-.102</td>
</tr>
<tr>
<td>Total employment (V2)</td>
<td>.890</td>
<td>.058</td>
<td>-.075</td>
</tr>
<tr>
<td>Value added (V3)</td>
<td>.866</td>
<td>.069</td>
<td>-.097</td>
</tr>
<tr>
<td>No. of establishments (V4)</td>
<td>.703</td>
<td>.233</td>
<td>-.184</td>
</tr>
<tr>
<td><strong>Instability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales (V5)</td>
<td>.024</td>
<td>.818</td>
<td>-.034</td>
</tr>
<tr>
<td>Total employment (V6)</td>
<td>-.416</td>
<td>.645</td>
<td>.054</td>
</tr>
<tr>
<td>Value added (V7)</td>
<td>-.540</td>
<td>.486</td>
<td>-.067</td>
</tr>
<tr>
<td>No. of establishments (V8)</td>
<td>.247</td>
<td>.463</td>
<td>-.103</td>
</tr>
<tr>
<td>Concentration of inputs (V9)</td>
<td>.369</td>
<td>.435</td>
<td>.092</td>
</tr>
<tr>
<td>Specialization ratio (V10)</td>
<td>-.112</td>
<td>-.017</td>
<td>.985</td>
</tr>
<tr>
<td>Concentration of outputs (V11)</td>
<td>-.112</td>
<td>-.038</td>
<td>.979</td>
</tr>
</tbody>
</table>

The final construct of industry complexity is really a proxy of the complexity of an industry’s supply chain, as its focus is predominantly on the number of inputs into the industry from other industries, and the number of outputs to other industries from the industry. However, the concentration of inputs (V9) loaded on a single factor, and hence was omitted from the complexity factor used in this study.

**Financial resources (organisational slack).** Similarly to chapter 9, financial resources are measured by the concept of organisational slack (Bourgeois, 1981). To capture available, recoverable and potential slack, this research uses secondary data at a firm level. The three types of slack are measured, respectively, as the current ratio; general expenditures and overheads to total sales; and debt to equity. Following existing research approaches (Álvarez-Gil et al., 2007), the three measurements were averaged over the two financial periods prior to this study, i.e. year 2006-2007, in order to avoid spurious estimates.

**Business strategy.** This study makes use of the same business strategy variables discussed in chapter 10. As such, Porter’s (1980) generic strategy was used because it is among the most popular strategic typologies, and its validity has been proven several times in empirical research. A set of questions were drawn up from Parnell (2006) and Powell (1992) to capture a firm’s business strategy.
Purchasing and supply chain “philosophy” (supplier development). A firm’s general purchasing and supply chain processes are measured as a proxy by estimating its supplier development efforts. Firms’ supplier development efforts are a good proxy for a firm’s supply chain “philosophy” and as such are also a good proxy for the firm’s general behaviour, attitudes and strategic processes within the purchasing and supply chain function (Krause, 1997). The construct of supplier development is identical to the construct discussed in chapter 7 and is based on previous research (Krause, 1997; Krause and Ellram 1997), and therefore has the merit of proven reliability and validity.

Target market. Finally firms were grouped into either a B2B or a B2C category, based on their primary SIC code and the SIC code manual, and also based on information on their primary customer group as given by FAME.

11.3.2. Empirical approach

The previous chapters (chapters 8, 9 and 10) have used standard regression analysis in analysing the relationship between market environment (industry life cycle), resources (organisational slack), business strategy (Porter’s generic strategies), firm’s supply management “philosophy” (supplier development) and their subsequent RPSM initiatives. In assessing the relationship between these factors a hierarchical regression approach was followed, which involved including variables as a set of steps to determine the path between industry life cycle, organisational slack, business strategy, supplier development and RPSM. This modelling technique is common in social and behavioural science (Cohen et al., 2003), and was appropriate for the previous chapters as they only considered two possible paths.

Nonetheless, the hypotheses proposed herein consider a number of paths that extend beyond the single intermediate relationship discussed in the previous chapters so far. Therefore, structural equation modelling (SEM) is a much more appropriate statistical method for the verification/falsification of the above hypotheses.
Structural equation modelling “consists of a set of linear equations that simultaneously test two or more relationships among directly observable”, or unobservable, variables and measurements (Shook et al., 2004, p. 397, see also Bollen, 1989). Furthermore, Shook et al. (2004, p. 397) note that SEM has a “unique ability to examine simultaneously a series of dependence relationships, where a dependent variable becomes an independent variable in subsequent relationships within the analysis”, and analyse multiple dependent variables. SEM is therefore a “useful tool in theory development because it allows the researcher to propose and subsequently test theoretical propositions about interrelationships among variables in a multivariate setting” (Badri et al., 2000, p. 162). In recent years SEM has become very popular in both strategic and operations management literature (see Shook et al., 2004, and Shah and Goldstein, 2006, respectively). Nevertheless, there are few guidelines and standard for the application of SEM (Shah and Goldstein, 2006). Partly this is due to the fact that many SEM text books lack rigorousness, leaving researchers with insufficient guidance (Shah and Goldstein, 2006, p. 149; Steiger, 2001). This, in turn, often causes serious methodological flaws in the use of SEM (Shah and Goldstein, 2006). It is therefore worth considering some of the elements that are involved in assessing the “goodness” of a structural equation model.

Before discussing “goodness of fit” indices, it is also worth noting that the literature often use the terms covariance structure modelling (CSM) and structural equation modelling (SEM) interchangeably. SEM is however a subset of CSM models, as CSM models often includes time series, whereas SEM almost exclusively uses cross-sectional data (Shah and Goldstein, 2006). For the purpose of this research it is also worth noting an important subset of SEM models, which is that of path analysis. Path analysis is the type of SEM that will be deployed in this study, as these models specify particular “patterns of directional and non-directional relationships” between observed variables, or prior factors (Shah and Goldstein, 2006, p. 149). Furthermore, path analysis appears to be one of the most used forms of SEM in the operational management literature. Often researchers construct factors prior to the model-building of SEM and as such treat them as observable variables in their model, but still acknowledge that these are latent variables because factors are created a priori (e.g. Cousins, 2005).

The inclusion of control variables in SEM is less common, which may be due to theoretical reasoning or methodological difficulties in incorporating these into the model. Existing
research in the field of RPSM has also neglected incorporation of control variables (e.g. Cousins, 2005; Carter et al., 2001, Carter, 2005). However, given that the nature of this research is considered at different levels – industry, firm and buyer-supplier relationship, a number of control variables have been included in the analysis so far. Including specific transaction characteristic variables and in particular, dummy coded variables, such as country of origin variables, would greatly increase the models complexity. Therefore, in order to overcome these econometrical problems, this chapter makes use of a relatively novel approach to SEM and the inclusion of control variables, which has been theorised and tested by Fletcher et al. (2006) and also used in the field of psychology (Kammeyer-Mueller and Wanberg, 2003). This method involves creating partial correlations\textsuperscript{20}, and allows the researcher to control for certain variables, but without including them directly in the model. However, one implication this has, but which is often neglected in existing empirical research that deploys this methodology, is that one variable’s effect on another variable cannot be directly interpreted if using partial covariances. The estimates are therefore not being considered in a manner similar to regression analysis, but rather the emphasis is on the path analysis and the sequence of relationship. In creating covariance between the discussed variables and RPSM practices, the author controlled for: industry, firm size; country of procurement; length of buyer-supplier relationship; service binary; product importance; product complexity; and power imbalance; and industry type binary variables\textsuperscript{21}.

For the purpose of this research, the Maximum Likelihood (ML) approach was used to estimate the parameters of the models. It is an often used function for SEM. ML however does have one strong assumption which is of potential concern to this research. As noted in chapter 6, the score of firms’ socially RPSM practices did not follow a normal distribution, and ML estimation requires multivariate normality, as “…violations of distributional assumptions are common and often unavoidable in practice and can potentially lead to seriously misleading results” (Schermelleh-Engel and Moosbrugger, 2003, p. 26). Nevertheless, Schermelleh-Engel and Moosbrugger (2003) also note that existing research has found that ML is rather robust against the violation of non-normality. Only in severe

\textsuperscript{20} SPSS allows the researcher to create covariances between factors, whilst controlling for other variables.

\textsuperscript{21} See chapter 7 for a detailed description of these variables.
cases of non-normality can ML estimation lead to Type 1 error, where the chi-square is inflated thus suggesting a good fit when in fact the model is a poor fit\textsuperscript{22}.

An important element of SEM, and therefore also of path analyses, is the goodness of fit of the default model, i.e. the model/path the conceptual framework proposes, to the saturated and independent model. The saturated model is one where the number of paths is equal to the degrees of freedom and hence the model is fully explainable. The independent model is one which assumes that all variables within the model are unrelated or neutral, resulting in fit indices close to zero (Garson, 2010; Schermelleh-Engel and Moosbrugger, 2003)

The author use AMOS to estimate the structural equation models. AMOS reports several fit indices, but one of the problems is that there are “no-well established guidelines for what minimal conditions constitute an adequate fit” (Schermelleh-Engel and Moosbrugger, 2003, p. 24). Schermelleh-Engel and Moosbrugger (2003, p. 24) note that “…applied researchers often have difficulty in determining the adequacy of SEMs because various measures of model fit point to conflicting conclusions about the extent to which the model actually matches the observed data”. As there is no consensus as to what constitutes a “good fit”, several indices should be used simultaneously (Schermelleh-Engel and Moosbrugger, 2003, p. 24; Tanaka, 1993). Researchers have recommended reporting a chi-square such as CMIN and/or GIF and/or RMSEA; a baseline fit measure such as NFI and/or CFI; a parsimony measure such as PNFI and/or PCFI; and an information theory measure such as AIC or CAIC (see Garson, 2010; Jaccard and Wan, 1996; Kline, 1998). Following these recommendations, and similar to those of Cousins (2005), this study reports the p-value for the chi-square; chi-square/degrees of freedom; CFI; TLI; GFI; RMSEA; RMR and NFI. It is worth briefly discussing each in turn, as they will be used as the main tools for determining the appropriateness of the models that will be addressed.

As a starting point many studies report the significance of the chi-square, which is an absolute fit measurement index. Often referred to as the “badness of fit”, a high p-value suggests a good model. Nonetheless, researchers have recently deployed the chi-square/degree of freedom measurement as an alternative to the standard chi-square figure

\textsuperscript{22} For further discussion on ML estimation and non-normality see also: Boomsma and Hoogland, 2001; Curran et al., 1996; and West et al., 1995).
since it has some obvious flaws in terms of being sensitive to sample size and normal distribution, and often leads to false rejections of the model (Hoe, 2008: Hooper et al., 2008). There is however no clear consensus with regard to the acceptable ratio of the normed chi-square ($\chi^2$/df), and recommendations have been ranging from as high as 5 to as low as 2. Hoe (2008) suggests a ratio of 3, or less, as a good indicator of model fit.

The Goodness-of-Fit statistics (GIF) and the Root Mean Square Error of Approximation (RMSEA) are also absolute measures. With respect to the GIF, a cut-off point of 0.90 has been recommended as a good fit (Hooper et al., 2008). The RMSEA is “one of the most informative fit indices” (Diamantopoulos and Siguaw, 2000, p. 85; cited in Hooper et al., 2008). A “close fit” is defined as a RMSEA value less than or equal to 0.05. RMSEA values between 0.05-0.08 an adequate fit, values between 0.08 and 0.10 are a mediocre fit, and values greater than 0.10 are not accepted (Browne and Cudeck, 1993, cited in Schermelleh-Engel and Moosbrugger, 2003). A final absolute fit measure is given by the root mean square residual (RMR), whose values range from zero to 1, and a good model has values closer to zero, with 0.05 being suggested as a close fit; 0.05-0.08 an acceptable fit; and 0.08-0.10 a mediocre fit (Hoe, 2008: Hooper et al., 2008).

The comparative fit index (CFI) is an incremental fit measures index, and is particularly appropriate for path analyses where the researcher seeks to establish a favourable model in comparison with the independent and saturated model (Garson, 2010). The model proposed herein does not use latent variables as it focuses on path analysis. Therefore the variables for industry characteristics, financial resources and business strategy etc. were constructed as factors in SPSS. This also ensures consistency of the variables with the empirical research presented in previous chapters. The Tucker-Lewis Index (TLI) is a baseline fit measure. Also known as the Non-normed Fit Index, it measures relative fit and “attempts to correct for the bias introduced when data are markedly non-normal in distribution” (Garson, 2010). The TLI is usually a number between 0 and 1. As a rule of thumb a TLI of 0.97 indicates a good fit, relative to the independent model, and a TLI greater than 0.95 is an acceptable fit (Schermelleh-Engel and Moosbrugger, 2003). Schermelleh-Engel and Moosbrugger (2003) suggest that a good fit is achieved when the CFI is equal to or greater than 0.97, and an acceptable fit is achieved with the CFI equal to or greater than 0.95.
Nonetheless, a cut-off point of 0.90 has also been suggested to indicate decent fit (Hooper et al., 2008).

Having outlined key elements of the methodology and empirical approach, the next section will focus on the testing of the proposed hypotheses, based on the discussed methodology.

11.4. Results and analysis

As noted earlier, appropriate SEM constructs and assessments are fairly vague. For example, some researchers consider only their specified conceptual path (Klein and Dawar, 2004; Rao, 2002; Seifert et al., 2004); others consider paths beyond the conceptualisation, by assessing whether indirect effects also have a direct effect (Carter, 2005); and finally some conceptualise path models but base their conclusion on empirical driven data (Cousins, 2005). Applying these approaches to the conceptual framework which was given in figures 25 and 26, implies assessing the extent to which both industry environment and financial resources may influence supplier development efforts as well. The problem with this however is that if the researcher specifies paths from virtually all boxes, then they will end up with a near-saturated SEM model, in which the absolute fit measures (CIF and RMSEA) are inflated but the parsimonious measures (PNIF and PCIF) are deflated considerably (Garson, 2010). Therefore, for the purpose of this research, the author follows the approach of Carter (2005) and Cousins (2005) and initially estimates only the path as specified in the model. However, based on the modification indices, the author assesses if there exists any other path relationships which are not included in the conceptual framework. The industry variables of munificence, dynamism and complexity were considered to be exogenous and as such do not carry any residual terms. The remainder variables within the model are treated as endogenous factors.

Figure 26 offers the complete model that is being tested in this chapter.
As a starting point of the analysis, the partial correlation figures are given in Table 40. Strong correlations can be found between munificence, available and potential slack, low cost strategy and socially RPSM. Similarly, available and potential, along with innovation strategies are correlated with environmentally responsible purchasing and supply management practices. In addition, supplier development efforts are positively correlated with both socially and environmentally RPSM.

There is also a set of strong correlations between the independent variables. For example, munificence is strongly and negatively correlated with available slack, but positively correlated with potential slack. Industry complexity is also associated with greater supplier development efforts.
<table>
<thead>
<tr>
<th>rowtype</th>
<th>varname</th>
<th>Munificence</th>
<th>Dynamism</th>
<th>Complexity</th>
<th>Available slack</th>
<th>Recoverable slack</th>
<th>Potential slack</th>
<th>Low price</th>
<th>Innovation</th>
<th>Niche</th>
<th>Supplier development</th>
<th>Social</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td></td>
<td>313</td>
<td>313</td>
<td>338</td>
<td>316</td>
<td>309</td>
<td>275</td>
<td>340</td>
<td>340</td>
<td>340</td>
<td>340</td>
<td>340</td>
<td>340</td>
</tr>
<tr>
<td>corr</td>
<td>Munificence</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Dynamism</td>
<td>-0.222</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Complexity</td>
<td>-0.229</td>
<td>-0.014</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Available slack</td>
<td>-0.173</td>
<td>0.006</td>
<td>0.026</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Recoverable slack</td>
<td>0.224</td>
<td>-0.038</td>
<td>-0.078</td>
<td>0.008</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Potential slack</td>
<td>0.179</td>
<td>0.054</td>
<td>0.079</td>
<td>-0.265</td>
<td>-0.094</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Low price</td>
<td>0.102</td>
<td>-0.079</td>
<td>0.079</td>
<td>-0.119</td>
<td>0.043</td>
<td>-0.046</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Innovation</td>
<td>-0.166</td>
<td>-0.133</td>
<td>-0.182</td>
<td>-0.031</td>
<td>0.041</td>
<td>-0.071</td>
<td>0.039</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Niche</td>
<td>-0.072</td>
<td>-0.106</td>
<td>0.023</td>
<td>0.028</td>
<td>-0.120</td>
<td>0.068</td>
<td>-0.076</td>
<td>-0.115</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Supplier development</td>
<td>-0.153</td>
<td>0.027</td>
<td>0.237</td>
<td>0.117</td>
<td>-0.138</td>
<td>-0.122</td>
<td>0.082</td>
<td>0.193</td>
<td>0.072</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Social</td>
<td>-0.062</td>
<td>0.071</td>
<td>-0.055</td>
<td>0.152</td>
<td>-0.079</td>
<td>-0.180</td>
<td>-0.166</td>
<td>0.072</td>
<td>-0.076</td>
<td>0.204</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>corr</td>
<td>Environmental</td>
<td>-0.037</td>
<td>-0.016</td>
<td>-0.123</td>
<td>0.150</td>
<td>-0.013</td>
<td>-0.183</td>
<td>-0.043</td>
<td>0.113</td>
<td>0.003</td>
<td>0.171</td>
<td>0.600</td>
<td>1.000</td>
</tr>
<tr>
<td>stddev</td>
<td></td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>0.672</td>
<td>0.377</td>
<td>1.803</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>0.805</td>
<td></td>
</tr>
<tr>
<td>mean</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>1.366</td>
<td>0.469</td>
<td>2.022</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>2.239</td>
<td>2.384</td>
</tr>
</tbody>
</table>
Table 41 - Path Analysis

<table>
<thead>
<tr>
<th>Market environment</th>
<th>Financial resources</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main effects</td>
<td>Main effects</td>
<td>Main effects</td>
<td></td>
</tr>
<tr>
<td>Munificence →</td>
<td>Available slack</td>
<td>-0.124***</td>
<td>-0.136***</td>
<td>-0.191***</td>
</tr>
<tr>
<td>Munificence →</td>
<td>Recoverable slack</td>
<td>0.063***</td>
<td>0.063***</td>
<td>0.151***</td>
</tr>
<tr>
<td>Munificence →</td>
<td>Potential slack</td>
<td>0.420***</td>
<td>0.632***</td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Available slack</td>
<td>0.893***</td>
<td>0.318**</td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Recoverable slack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Potential slack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Available slack</td>
<td>0.241**</td>
<td>0.422***</td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Recoverable slack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Potential slack</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main effects</td>
<td>Main effects</td>
<td>Main effects</td>
<td></td>
</tr>
<tr>
<td>Munificence →</td>
<td>Low cost</td>
<td>0.117*</td>
<td>0.193*</td>
<td></td>
</tr>
<tr>
<td>Munificence →</td>
<td>Innovation</td>
<td>-0.237***</td>
<td>-0.243***</td>
<td>-0.293***</td>
</tr>
<tr>
<td>Munificence →</td>
<td>Niche</td>
<td>-0.268***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Low cost</td>
<td>-0.199***</td>
<td>-0.173**</td>
<td>-0.242***</td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Niche</td>
<td>-0.137**</td>
<td>-0.197**</td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Low cost</td>
<td>0.117*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Innovation</td>
<td>-0.245***</td>
<td>-0.349***</td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Niche</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial resources</th>
<th>Business strategy</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main effects</td>
<td>Main effects</td>
<td>Main effects</td>
<td></td>
</tr>
<tr>
<td>Available slack →</td>
<td>Low cost</td>
<td>-0.944***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available slack →</td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available slack →</td>
<td>Niche</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Low cost</td>
<td>0.488***</td>
<td>-0.600***</td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Niche</td>
<td>-0.257*</td>
<td>-0.391**</td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Low cost</td>
<td>-0.099*</td>
<td>-0.094**</td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Niche</td>
<td>0.053*</td>
<td>0.188***</td>
<td>-0.111**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market environment</th>
<th>Supplier development</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Main effects</td>
<td>Main effects</td>
<td>Main effects</td>
<td></td>
</tr>
<tr>
<td>Munificence →</td>
<td>Supplier development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamism →</td>
<td>Supplier development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complexity →</td>
<td>Supplier development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Slack →</td>
<td>Supplier development</td>
<td>0.140*</td>
<td>0.297***</td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Supplier development</td>
<td>-0.349***</td>
<td>-0.576***</td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Supplier development</td>
<td>-0.064**</td>
<td>-0.177***</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business strategy</th>
<th>Supplier development</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cost →</td>
<td>Supplier development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation →</td>
<td>Supplier development</td>
<td>0.250***</td>
<td>0.388***</td>
<td></td>
</tr>
<tr>
<td>Niche →</td>
<td>Supplier development</td>
<td>0.089*</td>
<td>0.180***</td>
<td></td>
</tr>
<tr>
<td>Available Slack →</td>
<td>Social</td>
<td>0.160*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Social</td>
<td>-0.402*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Social</td>
<td>-0.080***</td>
<td>-0.097***</td>
<td></td>
</tr>
<tr>
<td>Available Slack →</td>
<td>Environmental</td>
<td>0.113*</td>
<td>0.15*</td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Environmental</td>
<td>-0.063*</td>
<td>-0.068**</td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial resources</th>
<th>RPSM</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Slack →</td>
<td>Social</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Social</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Social</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business strategy</th>
<th>RPSM</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cost →</td>
<td>Social</td>
<td>-0.185***</td>
<td>-0.222***</td>
<td></td>
</tr>
<tr>
<td>Innovation →</td>
<td>Social</td>
<td>0.176**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Niche →</td>
<td>Social</td>
<td>-0.101*</td>
<td>-0.071**</td>
<td></td>
</tr>
<tr>
<td>Available Slack →</td>
<td>Environmental</td>
<td>0.227***</td>
<td>-0.107*</td>
<td></td>
</tr>
<tr>
<td>Recoverable slack →</td>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential slack →</td>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplier development</th>
<th>RPSM</th>
<th>ENTIRE SAMPLE</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier development</td>
<td>Social</td>
<td>0.185***</td>
<td>0.225**</td>
<td>0.15**</td>
</tr>
<tr>
<td>Supplier development</td>
<td>Environmental</td>
<td>0.934**</td>
<td>0.922**</td>
<td></td>
</tr>
</tbody>
</table>

*p<0.01; **p<0.05; *p<0.10
Table 41 gives the main effects of the conducted structural equation models. At the aggregate level, it can be observed that the industry environment has a significant effect on a firm’s financial resources. Munificent environments negatively influence available slack and positively (negatively) influence the debt/equity ratio (potential slack). The nature of the industry environment also significantly influences a firm’s business strategy, with dynamic environments being negatively associated with innovative and niche business strategies. The observation that dynamic environments are negatively related to the level of innovation is somewhat unusual, as the literature often stress the importance of adopting and bringing changes to the market in dynamic environments. Nonetheless, this observation stresses the findings of chapter 8 and that stable market environment fosters RPSM, and the results presented in table 41 suggest that innovative strategies are associated with stable market, which in turn influence RPSM. Indeed, munificence, i.e. markets that are characterised as having rapid growth are negatively associated with both innovative business strategies, but positively related to low-cost strategies. There is also some evidence of a relationship between financial resources and business strategy, with available slack negatively influencing firms’ propensity to pursue low-cost strategies. Although not specified within the conceptual model, the path analysis also showed that firms within complex markets invest more in their suppliers and have comparatively better purchasing and supply “philosophies”. Similarly, firms that are constrained by financial resources, whether this is in terms of available and/or potential slack, fail to develop suppliers. This, in turn, has implications for both their socially and environmentally RPSM practices, since supplier development is positively and significantly associated with both socially and environmentally RPSM performance. A direct path also exists between lack of financial resources and RPSM. Firms that have relatively high liabilities compared to their equity level, i.e. are constrained by the financial obligation, appear to neglect their socially and environmentally RPSM practices, and hence these findings are consistent with the empirical findings of chapter 9. There is also a strong path relationship between business strategy and supplier development efforts, with firms pursuing niche and innovation

---

23 Due to evidence of multicollinearity between available and potential slack which appeared to obscure the results, the SEM results based on the B2B sample for the environmental RPSM score was estimated through a two stage approach, where the author omitted one of the variables from the path analysis.
strategies having relatively sophisticated supply processes in place. This, in turn, is a significant factor in shaping both social and environmental supply management practices.

Similarly to the findings of chapter 10, socially RPSM is significantly influenced by business strategy, with firms pursuing low-cost and niche strategies neglecting these responsibilities. In contrast, the only relationship between environmentally RPSM and business strategy is the indirect link between innovation and supply management processes, which also exists with respect to socially RPSM. The goodness of fit indices (table 42) for the path analyses of table 41 indicates a reasonable fit, suggesting that figure 26 is a fairly sensible representation of the relationship between aspects of strategic management and RPSM, at the aggregate level.

The author focuses now on the structural equation results for the B2C and B2B markets. The results are to some extent similar to the previous results at the aggregate level, in that there are strong relationships between industry environment and financial resources; industry environment and business strategy; and financial resources and business strategy. However, where these findings differ considerably from table 41 is in the relationship between financial resources and RPSM, and business strategy and RPSM. In the B2C market there is strong evidence to suggest that innovative firms engage more actively in both socially and environmentally RPSM. In terms of socially RPSM, firms pursuing innovative business strategies have greater supplier development processes in place, which in turn directly influence socially RPSM. In contrast, firms that pursue low-cost strategies strongly neglect socially RPSM, and therefore business strategy has both a direct and indirect influence on it. In terms of environmentally RPSM, business strategy has a direct impact on such processes, with firms pursuing innovative strategies being relatively proactive in environmentally RPSM. In contrast, in the B2B market there is not significant relationship between business strategy and supplier development efforts. There is, however, a strong relationship between financial resources and supplier development, which, in turn, has a significant influence on both socially and environmentally RPSM.

In terms of the goodness of fit of these structural equation models, the indices found in table 42 give some conflicting results. In terms of the chi-square index the models can be considered as a poor fit, in particular for the B2C sector models. Nonetheless, the chi-square index adjusted for the degrees of freedom suggests a very good fit across all
models. Similarly, both the GFI and RMR indices suggest very good fit across all models. Overall therefore, the SEM results above can be considered to have relatively good goodness-of-fit indices and as such represent a close fit in absolute terms. The incremental goodness-of-fit indices, also consider the models to be acceptable. For example all CFI figures are above 0.95. The TLI figures however suggest that the models are only mediocre at a best, but RMSEA figures also indicate that the specified models are reasonable, given that they lie between 0.04-0.08.

**Table 42 - Goodness of fit indices**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square , p-value</td>
<td>0.059</td>
<td>0.048</td>
<td>0.387</td>
<td>0.021</td>
<td>0.107</td>
<td>0.220</td>
</tr>
<tr>
<td>Chi-square/Degrees of freedom</td>
<td>1.821</td>
<td>1.843</td>
<td>1.063</td>
<td>2.177</td>
<td>1.575</td>
<td>1.295</td>
</tr>
<tr>
<td>CFI</td>
<td>0.971</td>
<td>0.967</td>
<td>0.994</td>
<td>0.956</td>
<td>0.976</td>
<td>0.970</td>
</tr>
<tr>
<td>TLI</td>
<td>0.824</td>
<td>0.819</td>
<td>0.969</td>
<td>0.732</td>
<td>0.866</td>
<td>0.852</td>
</tr>
<tr>
<td>GFI</td>
<td>0.991</td>
<td>0.981</td>
<td>0.988</td>
<td>0.990</td>
<td>0.984</td>
<td>0.985</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.049</td>
<td>0.069</td>
<td>0.020</td>
<td>0.059</td>
<td>0.057</td>
<td>0.043</td>
</tr>
<tr>
<td>RMR</td>
<td>0.023</td>
<td>0.034</td>
<td>0.026</td>
<td>0.023</td>
<td>0.029</td>
<td>0.027</td>
</tr>
<tr>
<td>NFI</td>
<td>0.947</td>
<td>0.941</td>
<td>0.930</td>
<td>0.934</td>
<td>0.946</td>
<td>0.914</td>
</tr>
</tbody>
</table>

**11.5. Discussion and conclusion**

This research offers a complete picture of the extent to which RPSM is a function of the firm’s business strategy among UK companies. In contrast to the previous three chapters, which have unpicked elements of this question, this research has considered it in its entirety, via the use of structural equation modelling.

The findings of this chapter showed that industry environment significantly influences a firm’s financial resources and business strategy, which in turn influences RPSM. Strong
support was therefore found for both hypotheses 1a and 1b in that the nature of the industry environment seems to have a strong indirect impact on RPSM, because it influences both business strategy and financial resources. Support was also found for 2a, as the evidence revealed a strong path from financial resources, particularly available and potential resources, to RPSM. Strong support for this hypothesis was in particular evident in the B2B market. Limited support was found for hypothesis 2b. Although financial resources did influence business strategy, they did not seem to indirectly influence RPSM through their influence on business strategy – rather financial resources directly influencing RPSM. Significant support was also found for hypotheses 3a and 3b, and hence business strategy influences RPSM both directly and also indirectly through its influence on general purchasing and supply management “philosophy”, particularly in the B2C market. Finally the evidence revealed that there was a strong path between financial resources and RPSM, but no path between business strategy and RPSM in the B2B sector. However, in the B2C sector there was strong evidence of a path between business strategy and RPSM but no path was evident between financial resources and RPSM. This leads to the conclusion that in the B2C sector RPSM is much more of a strategic issue, whereas RPSM is to a greater extent a discretionary investment in the B2B sector. Hence support was also found for hypothesis 4. As such, the key findings of this research can be summarised as follows:

- Munificence (the ability of an industry to sustain its own growth) plays, in particular, an instrumental role in shaping both financial resources and businesses strategy, both of which influence responsible purchasing and supply management practices.

- There is a limited indirect effect of financial resources on business strategy and subsequent responsible purchasing and supply management practices.

- There is a strong direct and indirect effect, through the strategic development of suppliers, of financial resources on responsible purchasing and supply management activities.

- There is a strong direct and indirect effect, through the strategic development of the suppliers, of business strategy on responsible purchasing and supply management activities.
In the B2C sector the strongest and most consistent path is found between industry environment and business strategies. Business strategies subsequently directly and indirectly influence responsible purchasing and supply management activities. This suggests that the industry environment is driving the business strategic use of responsible purchasing and supply management in the B2C sector.

In the B2B sector the strongest and most consistent path is found between industry environment and financial resources. Financial resources strategies subsequently directly and indirectly influence responsible purchasing and supply management activities. This suggests that the industry environment is driving responsible purchasing and supply management through its influence on financial resources, and as such it appears that these activities are relatively discretionary in nature for B2B firms.

In conclusion to this chapter, this research offers a clear view of the strategic and discretionary nature of RPSM. For the typical firm, RPSM practices are shaped by a combination of its financial resources and business strategy, both of which are significantly influenced by its market environment, in particular munificence. However, considering only the B2B and B2C sectors, RPSM is predominantly led by financial resources and business strategy, respectively. Hence, for B2B firms RPSM is largely a discretionary activity, which is undertaken when the firm can afford it and if they have few financial responsibilities. In contrast, in the B2C sector, RPSM is an integrated part of the business strategy and is determined independently from financial resources.
CHAPTER 12
12. DISCUSSION AND CONCLUSION

12.1. Introduction

This chapter provides a summary of the main findings and contributions of this thesis, while also addressing its main limitations. It therefore reiterates the main gaps of the existing literature as identified in chapter 2, and relates these to the key arguments proposed in the conceptual framework of chapter 4. It then relates the empirical findings to the conceptual framework, and offers a portfolio of new evidence that has emerged through the research of this thesis regarding the way in which businesses engage with RPSM, and the circumstances under which such activities are likely to take place. Furthermore, this chapter will highlight implications for practitioners and public policy-makers, before outlining future research avenues.

12.2. Broadening theoretical perspective of RPSM

The propositions developed in chapter 4 were developed due to the lack of integrating elements of strategic management with the RPSM literature. Whereas the existing literature had drawn on a number of theories to explain RPSM such as power-dependency (Amaeshi et al., 2008; Millington, 2008); agency theory (Pedersen and Andersen, 2006); attitude theory (Pagell and Wu, 2009); complexity theory (Matos and Hall, 2007); institutional theory (Darnall, 2006); resource based-view (de Bakker and Nijhof, 2002; Lee, 2008); and stakeholder theory (de Bakker and Nijhof, 2002; Maignan et al., 2002) very few studies considered the strategic perspectives of RPSM. The intention with this thesis was therefore to apply some of the emerging issues in the broader field of CSR which have in recent years been heavily integrated with the classical strategic management literature (Burke and Logsdon, 1996; Denchev, 2004; McWilliams and Siegel, 2001; Husted and Allen, 2007; Siegel and Vitaliano, 2007; Van de Ven and Jeurissen 2005), to the context of RPSM. In so doing, this thesis has responded to the need of assessing the strategic role of RPSM, because without a clear link between the firm’s strategy and
RPSM practices, such processes will never become widespread (Bhandakar and Alvarez-Rivero, 2007).

Furthermore, applying strategic management theory to the context of RPSM offers researchers an opportunity to build a more nuanced and complete understanding of the factors that influence RPSM. As such, this research does not only offer a better understanding of the reasons and circumstances under which firms will engage in RPSM, but it also helps inform policy-makers and managerial practice, by considering the types of firms and their unique strategic conditions that make them engage with, or neglect, socially and environmentally responsible purchasing and supply chain practices. In addition, it extends existing theoretical focus, from one where RPSM is considered as a part of firms’ responses to stakeholders’ expectations, to one where such processes are an integrated part of the firm’s strategic decisional framework.

In addition to broadening the theoretical perspective of RPSM, the methodology used for this piece of research has also expanded the way in which researchers may wish to examine a firm’s RPSM practices. As acknowledged in the literature review, often RPSM efforts are measured through self-reporting questionnaires, which in turn means that these observations have to be interpreted with caution, as they may suffer from social desirability and common source bias. In this thesis, however, the author has offered a new method of measuring both socially and environmentally responsible purchasing and supply chain practices, by asking respondents a set of open-ended questions and subsequently coding their answers.

12.3. Discussion and summary of main findings

The first step in approaching the field of RPSM was to offer a systematic and comprehensive literature review of the patterns and themes of RPSM. This review revealed that RPSM was clearly a phenomenon that had received considerable attention in recent years and continues to do so. It also showed that researchers have focused to a greater extent on environmental issues rather than on social issues, and rarely are these two different aspects of RPSM compared and contrasted. Studies are often set within a specific context, such as a specific industry or company. As such, there is a lack of understanding
of what a typical firm’s engagement with RPSM is like, because it is unclear how well these specific firm and industry observations transfer to other contexts. From the literature review, the author argued that there was a gap in terms of theoretical and empirical contributions towards understanding the RPSM practices within a strategic management framework, and also in terms of capturing and measuring RPSM performance.

In chapter 3, the author provided an overview of the strategic management literature, before integrating these theories with RPSM in chapter 4. Conceptually it was argued that the industry environment has two roles in shaping RPSM. One way was through the influence the industry environment had on firms’ business strategy, which subsequently influenced firms’ overall purchasing and supply chain processes, and also the strategic engagement with RPSM. The other way was through the role the industry environment plays in the firm’s financial resources, which may in turn facilitate discretionary spending on RPSM.

In chapter 5 the author outlined the methodology, including the sampling approach and the method used for obtaining reliable measurements for a firm’s RPSM engagement.

The empirical chapters provided a number of new insights into the state of RPSM in the UK, and significant new evidence to understand how a firm’s engagement is shaped by the industry environment, financial resources and business strategy.

Focusing first on some of the broader and more general findings of this research, it was revealed that:

- On average, few firms were considered to be proactive in terms of their socially responsible purchasing and supply management practices. In contrast, the results suggested that firms in general engage more actively with environmental issues. Nonetheless, there was greater variation in terms of firms’ social efforts, with a few firms excelling in this area.

- Firm size is positively correlated with both socially and environmentally responsible purchasing and supply management practices.
Industry sectors influence RPSM, and in particular the characteristics of the industry and the type of the product they procure are significantly influencing RPSM engagement. For example, firms that operate in socially sensitive industries and procures socially sensitive products, is highly proactive in terms of their socially responsible purchasing and supply management efforts. In contrast, for those firms that operate in environmentally impactful industries, and which do not procure environmentally impactful products, environmentally responsible purchasing and supply management efforts are neglected. Moreover, B2C market firms were found to be significantly more engaged with RPSM.

Supplier location is one of the most important factors in shaping socially responsible purchasing and supply management practices, with such practices, particularly, being undertaken when procuring from China and South East Asia. In contrast, environmentally responsible purchasing and supply management practices are not as contingent on the supplier’s location, although these practices are significantly neglected when procuring from India.

The power imbalance between buyer and supplier also positively influences RPSM practices, with relative buyer power advantage positively influencing RPSM.

Reflecting the main themes of this thesis, the empirical chapters 8, 9, 10 and 11 also revealed new insights into our understanding of how firms engage with RPSM practices. More specifically, these chapters highlighted how the industry environment, financial resources, business strategy and the inter-relationship between these factors influenced RPSM practices. The empirical findings suggest that:

(Chapter 8) Both socially and environmentally responsible purchasing and supply management practices are facilitated in stable industry environments. In general, firms engage more actively with such practices during the maturity stage of the industry life cycle, but strongly neglect these in the introduction phases. In particular, a stable and mature industry environment fosters RPSM in the B2C market, but this evidence is less prevalent in the B2B market.
Nonetheless, there was mixed evidence of the industry life cycle influencing the strategic development of suppliers.

- (Chapter 9) Financial resources, as measured through organisational slack, are significantly influencing RPSM practices, although stronger evidence for this was found with respect to socially responsible purchasing and supply management practice. The nature of the influence on RPSM of financial resources did however not differ. The evidence showed that available slack, i.e. immediate financial resources, positively influenced RPSM, whereas potential slack, i.e. relative economic debt liabilities, negatively influenced it. A key finding of this research, however, was that financial resources played a much stronger role in the facilitation of RPSM in the B2B market, whereas they were insignificant in influencing these activities in the B2C market. In addition, there was also some evidence to suggest that financial resources influenced the engagement with supplier development, which in turn also influenced RPSM practices.

- (Chapter 10) Business strategy, in terms of Porter’s generic strategies, was shown to influence RPSM practices significantly, both directly and indirectly, through its influence on the strategic development of suppliers. In general, it was observed that low cost and niche strategies were negatively associated with socially responsible purchasing and supply management practices. In addition, differentiation strategies were positively influencing firms’ environmentally responsible purchasing and supply management activities in the B2C market. Nonetheless, focusing only on the B2B market, there was no obvious relationship between business strategies and RPSM engagement.

- (Chapter 11) The final empirical chapter used a structural equation modelling approach to integrate the role of industry environment, financial resources and business strategy in shaping RPSM practices. The findings of this study revealed that industry environment shapes both financial resources and business strategy, which in turn both influence RPSM directly, but also indirectly through their influence on supplier development efforts. The relationship between industry environment, business strategy and subsequent RPSM performance was in particular profound in the B2C market. In contrast, the relationship between
industry environment, financial resources and subsequent RPSM was much more significant in the context of the B2B market.

Reflecting these finding in terms of the broader conceptual framework, this research finds support for propositions 1a and 3a, since the industry environment influences RPSM practices indirectly through the influence on both business strategy and financial resources, respectively. These two factors in turn influence RPSM directly, and hence this thesis finds support for propositions 1b and 3b. Strong evidence was also found for proposition 1c and 2, in that a firm’s strategic development of its supply chain function positively influenced its RPSM practices, but such strategic developments were however a function of the business strategy, and also of financial resources, for which the conceptual framework did not account. Limited support was found for 3c, and both conceptually and empirically this proposition has been difficult to assess, despite the link between financial resources and business strategy being implicit in much of the strategic CSR literature. Finally strong support was found for proposition 4, as strategic management, and in particular business strategy, do influence RPSM engagement differently depending on the target market.

12.4. Contributions to the existing literature

Considering the contributions of this thesis to the wider contributions that have been made to the RPSM field, in particular in recent years, the author sees a number of distinctive features of this research which have assisted the understanding of RPSM engagement, but which also have raised a number of issues to be addressed in future research.

The first contribution of this thesis relates to the literature review, which provides one of the first and arguably one of the most comprehensive analyses of patterns and themes within the RPSM field. From this, a number of avenues for future research opportunities were outlined, including issues around broadening the theoretical sphere of RPSM and also establishing a reliable measure of RPSM. Reflecting, in particular, these two points, a second contribution the author makes to the RPSM field is concerned with the way RPSM engagement has been approached through the classical strategic management perspective. As already acknowledged, such perspectives have been readily applied to the broader concept of CSR, but have so far received very limited attention in the context of RPSM.
The third contribution is concerned with the methodology used, and this is one of the thesis’s main strengths, as it gives the most comprehensive view of RPSM practices in the UK to date, as significant efforts have been made to reduce both social desirability and common source bias.

The fourth contribution is concerned with the empirical findings of this thesis, which have increased the understanding of how firms’ engagement with RPSM is shaped by the industry environment, through its influence on both financial resources and business strategy. Moreover, this research has shown how B2C firms appear to be actively linking business strategy with RPSM but also with the strategic development of suppliers and the supply “philosophy”. In contrast, B2B firms and their RPSM seem to rely heavily on the financial position of the firm, and the extent of what it can afford. As such, this research has highlighted the strategic integrated role of RPSM in the B2C market, while also establishing that these practices remain relatively discretionary for B2B firms.

Furthermore, in addition to the well-established drivers of RPSM such as employees (Drumwright, 1994; Carter and Jennings, 2004), organisational values (Walker et al., 2008; Zhu and Sarkis, 2006), firm size (Min and Galle, 2001), top-management support (Carter and Jennings, 2004; Lee, 2008), customer pressure (Green et al, 1996; Min and Galle, 2001), and regulation (Hall, 2000; Worthington et al., 2008), this research has confirmed previous qualitative findings (Lamming and Hampson, 1996; Walker et al., 2008; Worthington et al., 2008) and shown that industry environment and business strategy can be a major driver of RPSM, in particular in the B2C sector. Moreover, it has clearly established the role of slack as a driver of RPSM, rather than the ambiguous concept of costs (Cote et al., 2007) as being a barrier to RPSM (Cooper et al., 2000; Murphy and Poist, 1995; Welford and Frost, 2006). Finally, this research also establishes a link between firm- and operational-level strategies. The evidence revealed that firms that pursue differentiation strategies are much more engaged with their supplier base, in terms of their development efforts, and this in turn improves RPSM practices. In contrast, firms pursuing low-cost strategies relatively neglect the development efforts of their supplier base and their RPSM responsibilities.

In terms of theoretical contributions offered by this thesis, is the empirical application of strategic management perspective on socially and environmentally responsible activities, in
the context of the purchasing and supply chain function. As noted in chapter 3, numerous frameworks have been proposed within the strategic management literature and these emphasise the role of both the industry environment and firm-specific resources in guiding firms’ strategic behaviour. Although the author has focused more on the influence of industry environment, rather than firm-specific resources, these theories proved helpful in understanding firms’ RPSM engagement. As such, it indicates that a broader theoretical view, which extends beyond stakeholder management, may be useful in understanding how firms initiate and practice RPSM responsibilities.

**Figure 27 - Strategic Management and the Role of Business Strategy in RPSM, A Final Thought and Observation**

This research also gives new insight into the existing literature about the motivations of RPSM engagement. As illustrated in figure 27, on one hand (referring in particular to the B2B sector) industry environment influences financial resources which in turn influence RPSM. In this case RPSM appears to be a completely discretionary activity, which is contingent on the firm’s slack and, in particular, the existence of available and potential slack. On the other hand (referring in particular to the B2C sector), industry environment influences business strategy, which in turn influences both the supply management “philosophy” and RPSM practices. In this case RPSM is to a degree part of the overall
strategic vision for the firm’s purchasing and supply chain function, and partly an integrated part of the firm’s business and positioning strategy, which is not contingent on financial resources. In addition, RPSM were found to be a product of supplier development efforts, however, these, similar to RPSM practices, were significantly influenced by financial resources, particularly in the B2B sector.

The findings of this research therefore suggest that scholars should acknowledge the different motives for RPSM amongst firms in different industry sectors. Controlling for industry through dummy variables may not be sufficient, as this would only measure the “average” firm’s RPSM practices. In that case, the “average” is influenced by the strength of the motives in sub-samples, and will therefore not give a clear picture of what drives RPSM. Rather, the researcher recommends scholars to divide their data sample, assuming that their sample size allows it, into industry sectors, in order to establish clearly motives and drivers of RPSM.

The findings of this research also have implications that do not relate directly to the research questions. Existing research has shown that misalignment between business strategy and purchasing and supply chain practices can have significant consequences for a firm’s financial performance, both at the firm level and at the operational level (Baier et al., 2008; Cousins, 2005; González-Benito, 2007). The evidence of this research has however shown that firms often fail to align the firm-level strategies with their purchasing and supply strategies, particularly in the B2B sector. For example, it has shown that B2B firms often neglect supplier development efforts, regardless of their business strategy; as such efforts are also contingent on the B2B firm’s financial resources. The implication of this is that firms may not optimise their performance at either the firm or operational level.

12.5. Practitioner implications

The conceptual and empirical contributions of this thesis have some important implications from a practitioner’s perspective. For example, practitioners cannot ignore that consumers do not set the boundaries of the firm’s responsibilities at the firm level itself, but view supply chain partners as an integrated part of the firm’s operations, and increasingly expect firms to ensure socially and environmentally responsible purchasing and supply chain
practices (Roberts, 2003). In addition, there is evidence to suggest that institutional investors are increasingly considering the social and environmental stances of firms (Friedman and Miles, 2001; Sparkes and Cowton, 2004), and FTSE4Good criteria highlight the importance of such practices in the supply chain. Nonetheless, until such practices become appreciated by the wider financial sectors, CSR and RPSM will never truly become a strategic issue for firms (Vilanova et al., 2009).

This research has, in particular, practical implications for firms pursuing differentiation strategies. Along the lines of managerial implications as highlighted by McWilliams and Siegel (2001), managers and supply practitioners should evaluate the ability and the extent to which product differentiation is possible in terms of RPSM practices. At the same time managers need to consider carefully the necessary resources and costs associated with implementing and externally promoting their RPSM practices. Therefore, managers and supply practitioners must treat any decision regarding RPSM “precisely as they treat all investment decisions” (McWilliams and Siegel, 2001, p. 125). As such, firms should only invest in, engage and promote RPSM to the extent that the increased revenues, as a result of RPSM, are equal to the additional costs of implementing and monitoring RPSM (McWilliams and Siegel, 2001). Furthermore, RPSM practices must be an integrated part of the overall business strategy, as misalignment can cause firms to lose the benefits from RPSM (Cousins, 2005; Porter and Kramer, 2006).

Marketers also have an important role in utilising RPSM benefits to the firm’s competitive advantage. Lantos (2001, p. 623) argues that the marketing function is the “function most closely related to satisfying and communicating with most of the organisation’s constituencies”, and therefore the marketing department should take a leadership role and responsibility for CSR activities. Marketers therefore must “leverage” the firm’s RPSM “activities via marketing communications such as publicity and advertising” in order to ensure that such practices are a part of the business strategy (Lantos, 2001, p. 624).

Nevertheless, the extent to which firms engage strategically in RPSM should be dependent on the claims and the importance of stakeholders (Maignan and McAlister, 2003). Not all stakeholders should be given the same level of attention, and firms should only respond to the RPSM stakeholder claims that can threaten the performance of the firm (Boatright, 1999). In deciding the appropriate level of investment into RPSM, firms must establish
clear cost-benefit analyses for each stakeholder group (Maignan and McAlister, 2003). The literature however is lacking in measurements to establish CSR and RPSM benefits. Estimating the relationship between RPSM and firm and operational performance is a complex task, and although firms should theoretically continue investment in RPSM as long as the marginal benefit is equal to the marginal cost of strategic RPSM, the dynamics of the RPSM concept prevents such calculations (see Lantos, 2001, p. 626).

As noted by Lambert et al. (1998), top management support is crucial for any purchasing and supply chain activity, and senior management leadership for strategic CSR is also important (Lantos, 2001). Therefore if firms are to engage strategically in RPSM, such activities must become a part of the values of the firm, and social and environmental purchasing and supply chain initiatives must become a part of the firm’s mission and vision statement. Moreover, although external marketing of RPSM is important for its strategic role, RPSM must also be promoted internally. In addition, if it is to yield real strategic benefits, purchasing and supply chain personnel must be incentivised to engage in these activities and implement them into individual buyer-supplier relationships. This however implies that purchasing and supply chain personnel must not be evaluated solely on financial criteria, but also social and environmental criteria.

12.6. Research limitations and further research opportunities

Although this research has contributed significantly to understanding the extent to which business strategy plays a role in shaping CSR practices in purchasing and supply chain activities, it does have a number of limitations.

Among others, this research is centred on RPSM practices amongst firms with significant operations in the UK, and thus focuses on purchasing and supply chain transactions into these UK-based firms. However, further research is needed to establish whether business strategy influences RPSM to the same extent in other contexts, based on RPSM within purchasing and supply activities into other countries. Similarly, this research has not considered the extent to which business strategy might influence RPSM differently depending on whether the procurement transaction in question was a “domestic” or “foreign” one. It did, however, control for country of origin of the product/service, but it
might also be worth dividing the sample into domestic versus foreign purchasing transaction for a better comparative analysis.

This research has contrasted the extent to which business strategy influences RPSM between B2B and B2C. Nevertheless, it is difficult to classify firms into serving either one of these sectors. Many firms are diversified, and may serve both sectors simultaneously. This in turn might induce a certain level of measurement error in the empirical analysis. This research grouped firms into these two sectors based on the firm’s primary product or service SIC code, along with information about the firm’s primary customer group obtained from FAME. Ideally, the division of B2B and B2C should have been made at the plant or establishment level rather than at the firm level (Siegel and Vitaliano, 2007). Alternatively, the researcher could have divided products into the categories of search goods; non-durable experience goods; durable experience goods; experience services; and credence services - similar to Siegel and Vitaliano (2007). Grouping of firms, as above, was not chosen as this would have created too small samples, and using moderating effects, rather than dividing the sample, caused serious multicollinearity issues which obstructed the “true” picture of how industry, resources and business strategy influence RPSM practices.

This thesis also combines data from different levels of analysis. It makes use of data from the industry level, firm level, the operational level and the individual buyer-supplier relationship level. In theory this does not pose any significant problems. Indeed, a number of researchers in the operational and supply chain literature also analyse and combine different levels of analysis. It does however require the appropriate use of control variables. Although this research controls for a number of these, both at the firm level (firm size) and at the operational and buyer-supplier level (supplier location, length of relationship, product complexity, product importance and power imbalance), the author acknowledges that there is likely to be a set of variables which also influence RPSM and which were not included in the statistical analysis. Nevertheless, the control variables that were included were based on existing buyer-supplier relationship research, and should therefore provide a fairly robust base model, to which other independent variables can be added without obscuring any other factor that might influence RPSM.
This research makes use of secondary data to complement the primary data. The main reasons for this were to offer a more rigorous analysis and to avoid common source bias. However, the research suffers from some of the typical problems associated with the use of secondary data. Among others, the availability and scope of secondary data were limited. For example, in chapters 8 and 11 it was necessary to exclude the finance sector, as the UK Annual Business Inquiry does not survey this industry, and hence it was not possible to obtain industry characteristics for the finance industry. For chapters 9 and 11 financial data, necessary for the construction of the elements of organisational slack, were missing for a number of firms, thereby preventing this study from considering the impact of financial resources on the complete sample. Despite this limitation, which in some cases has decreased the sampling size, the research and the results presented herein are arguably more reliable because they do not suffer from common source bias. The division between B2B and B2C also means that the number of observations is at the borderline of appropriate numbers for statistical analysis, at the firm level. Nevertheless, some authors in the field of RPSM have used fewer, or similar, observations for their statistical analysis than those included in both the B2B and B2C samples (e.g. Jiang, 2009; Murphy et al., 2002; Rao and Holt, 2005; Simpson et al., 2007; Tadepalli et al., 1999).

Finally, this research argued that industry environment, financial resources and business strategy influenced the firm’s purchasing and supply chain “philosophy”. In measuring such a “philosophy”, which is a rather vague concept, I used a variable intended to measure supplier development efforts, as adapted from the work of Krause (1997). Although supplier development efforts may be part of the purchasing and supply chain “philosophy” and the strategic investment in the supply chain function (Krause, 1997). The author acknowledges that it is unlikely that “supplier development” fully captures a firm’s attitudes and approaches towards the purchasing and supply chain function. A more rigorous approach could follow the work of Cousins (2005) and assess how business strategy is related to operation collaboration, marketing collaboration and strategic collaboration between buyers and suppliers, and how this in turn influences RPSM.

This research also highlights a number of avenues for further research. Although it shows that strategic management issues matter in the shaping of RPSM practices, it does not fully consider their implications. The conceptualisation is largely that business strategy matters because RPSM can be used to differentiate the product and the firm, and because business
strategy influences general purchasing and supply chain processes. Nevertheless, it may be that business strategy matters not due to differentiation but rather to the way that business strategy influences firms’ perceptions of risk (Culp, 2001) or because it influences firms’ propensity to respond to stakeholder pressure and legitimacy claims (Burke and Logsdon, 1996; Hutchinson, 1996). For example, it may be that firms pursuing differentiation strategies, as a result of better financial resources (Miller, 1988), are more willing to use these resources to satisfy stakeholders’ expectations and demands. As such RPSM would become an issue of legitimacy rather than differentiation. Similarly, it may be that firms pursuing differentiation strategies cannot afford negative publicity and therefore engage in RPSM. Therefore, further research should seek to establish the strategic motives that drive RPSM practices, in particular in the B2C market.

As an extension to this, further research is needed to understand why RPSM in the B2B sector is largely a discretionary activity. One potential explanation for the discretionary role of RPSM in B2B market is lack of understanding and evidence of the benefit of RPSM practices. B2C firms are arguably more visible and they are often the ones that are subject to negative media attention (see Phillips and Caldwell, 2005). In addition, there is clear evidence of the fact that consumers are considering both social and environmental issues when shopping (Mohr et al., 2001). Therefore, B2C firms have an incentive to engage in CSR, including RPSM, which is aligned with the overall objective and strategies of firms in order to prosper and survive. This explains why the evidence presented herein shows that B2C firms, on average, are much more proactive in RPSM than B2B firms, and why business strategy in particular plays a role in RPSM practices of B2C firms. Further research is therefore needed to examine properly the benefits of RPSM practices, with a particular focus on the benefits for B2B firms. Existing research has shown that RPSM can result in increased financial performance (e.g. Carter, 2005); this research has however focused on consumer manufacturing industries. It is nevertheless less clear how B2B firms may benefit. Further research is needed to understand and clearly establish if RPSM generates improved financial performance, greater supplier flexibility, and greater levels of trust and collaboration, which ultimately improve the performance of the supply chain, and which benefits firms in all sectors. In general though, there is a clear lack of empirical evidence to ascertain that RPSM is leading to better firms and operational performance. Research into this issue is arguably one of the most important aspects for any future RPSM, as otherwise such practices may not survive in the long run.
In the CSR literature it has often been debated whether CSR leads to improved performance or *vice versa*. Researchers have argued that abnormal financial performance, i.e. performance adjusted according to the industry’s average performance, is due to “good management”, and that “good management” includes social and environmental performance (Backhaus et al., 2002; Simpson and Kohers, 2002; Waddock and Graves, 1997). Therefore future research may also wish to explore if RPSM can be explained by the “good management theory”, and if so then RPSM may neither be a strategic nor a discretionary activity, but something that is just a part of the organisational and managerial values, which have indeed been found to be a major driver of RPSM (Cooper et al., 2000; Lamming and Hampson, 1996; Min and Galle, 1997; Walker et al., 2008).

Currently, the author is extending the work of this thesis through qualitative assessment of RPSM. This research project is entitled “Responsible Supply Chain Management: Learning from Corporate Experience”, and has won funding from the European Academy of Business in Society. This research is based on case studies with ten UK-based firms in the telecommunication, retail, electronic and engineering, publishing and pharmaceutical industries. In each industry one large and one small to medium size enterprise is being interviewed. One of the aims of this research is to assess the extent to which RPSM is a part of the organisational strategy, in terms of horizontal and vertical integration. In so doing, the author is interviewing senior management and general employees, such as category managers or human resource managers, and also people from the executive board, the procurement and supply chain department, the human resource department, the sales and marketing department, the legal department and the CSR department. As part of this project the author is seeking to answer some of the limitations mentioned above, including an assessment as to why business strategy matters, the role the industry environment plays in facilitating such practices, and how these practices have changed during the recession, when firms may have been financially constrained.

Finally, one of the prominent issues in responsible purchasing and supply chain management is concerned with the way in which these practices differ when firms are procuring nationally and internationally, and in particular how they differ when firms procure from less developed countries. To answer this question, the author is currently working on a systematic review of the sustainable supply management literature, which
has won funding from the Network for Business Sustainability, and this piece of work is geared towards influencing practitioners. As such, this research project reviews not only the academic literature, but also considers industry examples of best practices that can be used to guide firms’ sustainable supply management practices, and help them build, implement and ensure sustainable supply management practices, in both a domestic and international setting.

12.7. Final conclusion

CSR and RPSM are two concepts which have received considerable attention in the last two decades. Both these functions have been acknowledged to have the potential to generate real strategic benefits to the firm.

This research combines these two concepts and looks at the phenomenon that is CSR within purchasing and supply chain practices. RPSM has received considerable attention in recent years, partly due to a number of high-profile cases of unethical supply chain management, increasing stakeholder pressure and the evolution of outsourcing practices, along with the establishment of buyer-supplier relationships across different countries and cultures with weakly enforced regulatory and institutional frameworks (Millington, 2008).

This research has considered RPSM through the conceptual lenses of industrial economic and strategic management. More specifically, it has applied quantitative techniques to examine the extent to which strategic management and business strategy influence CSR practices within the context of global purchasing and supply chain transactions. In answering this question the researcher used the concept of industry life cycle, task environment, organisational slack and Porter’s generic strategies.

Using a novel data collection approach adapted from Bloom and Van Reenen (2007), which involved collecting qualitative information on firms’ RPSM practices and subsequently coding these on a scale from 1 (poor) to 5 (good), this research reduces the probability of social desirability bias, which is a critical issue for ethical research (Crane, 1999). Furthermore, by supplementing these primary data with secondary data to capture
industry and firm characteristics, this research also reduce the probability of common source bias.

As a contribution to the existing literature, this thesis has offered one of the first conceptualisations of the relationship between strategic management and RPSM. Empirically, this research has provided sound evidence to suggest that industry environment influences both socially and environmentally RPSM practices. In the B2B sector, industry environment indirectly influences RPSM practices through its influence on financial resources, which in turn is a strong predictor of a B2B market firm’s propensity to engage in RPSM. For the B2C market, industry environment significantly influences firms’ propensity to engage in RPSM, through its influence on business strategy.

Therefore, the findings of this research show that RPSM is significantly influenced by business strategy in the B2C sector, but strongly influenced by financial resources in the B2B sector. In turn, this suggests that RPSM is a strategic and a discretionary issue for firms operating in the B2C and the B2B sector, respectively.

Nevertheless, further research is needed to understand fully the role of business strategy in RPSM. For example, this research does not clearly establish whether this relationship is due to strategic motives of differentiation, risk management or legitimacy attainment. In addition, further research should seek to establish clearly and measure the benefits of RPSM, such that managers can make informed choices about the extent to which they should invest in it.
BIBLIOGRAPHY


Page 312 of 367


Bourgeois, L., and Singh, J. 1983. Organizational slack and political behavior within top management teams: *Faculty of Management Studies, University of Toronto*.


Hall, J. 2000. 'Environmental supply chain dynamics.' *Journal of Cleaner Production*, 8(6), 455-471.


Sarkis, J. 1999. How Green is the Supply Chain? Practice and Research: SSRN.


APPENDIX 1 - QUESTIONNAIRE

Socially and Environmentally Responsible Procurement

During the past decade firms have come under increasing pressure to consider the environmental and social aspects of supply chain relationships. I want to explore relationships between you and your suppliers in order to find out how those relationships work in practice. Supply relationships can be extremely difficult to manage and I am interested in learning lessons both from those which are successful and those where there are difficulties. We’re also keen to talk both to those companies not currently involved in environmental and social aspects of supply management and to companies with a long and substantial heritage of environmental and social supply chain management.

Full confidentiality is assured. With your permission I would like to record this interview. The details of this conversation will not be revealed outside of this room/phone call and neither individuals nor firms will be identified in any subsequent analysis.

Because our research focuses on very different companies, much of the information I ask you for will be recorded on scales, which require you to tick an appropriate box; I will also ask you, where necessary, for supporting information. I expect that the total time taken to participate in the survey will be approximately one hour. A report that summarises the main findings of the research, including information that will allow your firm to benchmark itself against firms in the same industry sector and firms of a similar size, will be emailed to each respondent upon completion of the research.

Section 1: ABOUT YOUR ROLE

I’d like to begin by asking you some general questions about your role within your company.

1.
What is your current job title?
2. Please describe your role and responsibilities [Who do you report to? And who reports to you?]

3. How long have you worked in this role in this company?

4. How long have you been working for this company?

5. What is your nationality?

Section 2: ABOUT YOUR COMPANY

In order to place your supply chain practices within a wider context I would now like to ask a set of questions about the structure of your company and the competitive environment within which it operates.

6. Is the business unit (i.e. plant, subsidiary, division) where you work: Please tick one:
   The parent company of a group of companies □
   A subsidiary company of a group of companies □
   An independent company, not part of any group □

7. Is your company (please tick all that apply):
   A State-Owned Company Yes □ No □
   A Private Company Yes □ No □
   A Company Listed on a Stock Exchange Yes □ No □
   A Family-CONTROLLED Company Yes □ No □
   A Multinational Company Yes □ No □
   A Wholly-Owned Subsidiary of an MNC Yes □ No □
   A Joint-Venture Yes □ No □

8. What is the nationality of your parent company? (Please tick one – or possibly more than one in the case of a multinational JV)
   British □
   American □
   German □
   Japanese □
   French □
   Italian □
Other (Please specify)

9. Approximately how many people are employed in the global operations of your Group? (If you’re unsure, please estimate)

10. Approximately how many people are employed full time and part time in your business unit (subsidiary, plant, division etc)? (If you’re unsure, please estimate)

11. What is your company’s main activity? By main activity, we mean the activity that the largest group of your employees is associated with. (Please tick one)

- Agriculture □; Footwear (and leather) □; Packaging □;
- Apparel and Textiles □; Furniture □; Pharmaceuticals □;
- Aviation/Defence □; Machinery/Equipment □;
- Printing/Paper □; Banking/Finance □; Manufacturing □; Retailing □;
- Chemicals □; Media □; TLC/Communications □;
- Construction □; Medical Apparatus □; Tourism/Travel □;
- Consumer Goods □;
- Mining (and caves) □; Transport □; Electronics/Electrical □;
- Motor Industry □; Food & Drink □; Energy/Utilities □;
- Oil & Gas □; Hospital and health care □;
- Other, please specify ______________

I would now like to briefly discuss your perceptions of your company’s strategy and the competitive pressures encountered in its main market.

12. Could you please indicate the accuracy of the following statements about your business unit’s strategy?

Adapted from Powell (1992) and Parnell (1997) – Strategy

<table>
<thead>
<tr>
<th>Not at all Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

- We command a higher price than other firms by making a distinctive, high quality product
  □ □ □ □ □ □ □
- Our prices are among the lowest in the industry
  □ □ □ □ □ □ □
- We are often first to introduce innovative products
  □ □ □ □ □ □ □
Although quality is our first priority, when competition is fierce, we might switch suppliers to cut costs

We spend more heavily on R&D than our competitors

We primarily seek to provide our goods and services at the lowest possible price

We focus on a narrow, specific customer group

We primarily seek to provide the highest quality goods and services possible

We provide products and services primarily to a well-defined customer group

13. Could you please indicate the accuracy of the following statements about your industry?

Adapted from Stuart (1993) and Lee et al. (2009) – Market environment and uncertainty

<table>
<thead>
<tr>
<th>Not at all Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

The business climate in our industry is very competitive

Winning in the marketplace is a very tough battle

What used to be good enough to succeed in the marketplace is no longer sufficient for success

Your industry is characterized by rapidly changing technology

It will be difficult for you to remain competitive if you don't keep up with changes in technology

The rate of process obsolescence is slow

Section 3: ABOUT YOUR PURCHASING POLICIES AND STRATEGIES

I would now like to ask a set of questions about your perceptions of purchasing policies and strategies in your company.

14. To what extent does the establishment where you work have operational control over the following aspects of sourcing strategy?

   No Autonomy   Complete Autonomy
15. To what extent do you agree with the following statements?

We use established guidelines and procedures when evaluating supplier performance

We perform site visits to supplier premises to help improve their performance

We invite supplier personnel to our premises to increase awareness of how their product is used

16. To what extent do you agree with the following statements?

In this company, purchasing is considered a vital part of our corporate strategy

Purchasing views are considered important in most top managers’ eyes

Top management is supportive of our efforts to improve the purchasing department

17. Approximately, what proportion of the value of your total purchases comes from abroad?

0%-10% □ 51%-60% □ 11%-20% □ 61%-70% □ 21%-30% □ 71%-80% □ 31%-40% □ 81%-90% □ 41%-50% □ 91%-100%
18. Which of the following geographic areas do you buy products/services from?

Western Europe  Yes ☐  No ☐
Eastern Europe  Yes ☐  No ☐
North America  Yes ☐  No ☐
Central/South America  Yes ☐  No ☐
North Africa  Yes ☐  No ☐
Central/South Africa  Yes ☐  No ☐
Middle East  Yes ☐  No ☐
Far East  Yes ☐  No ☐
India  Yes ☐  No ☐
China  Yes ☐  No ☐

19. Which of these statements reflects your firms’ international presence?

Adapted from Mjøen and Tallman (1997) – International Experience

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Your firm has a long tradition of purchasing internationally
☐ ☐ ☐ ☐ ☐ ☐ ☐

Your firm has been procuring goods from foreign countries for many years
☐ ☐ ☐ ☐ ☐ ☐ ☐

Purchasing goods abroad has been part of your strategy for many years
☐ ☐ ☐ ☐ ☐ ☐ ☐

Section 4: TRANSACTION SPECIFIC-CHARACTERISTICS

I would now like you to focus on particular supply relationships. I would like to remind you that managing supply relationships can be extremely difficult and I am interested in learning lessons both from those which are successful and those where there are difficulties. Full confidentiality is assured. Neither the details of this conversation, nor the firms involved, will be revealed outside this room/phone call.

I notice from our earlier discussion that you purchase goods from China (India/location).

Please identify a product that you source from a typical supplier in China (India/location) of whom you are well aware and where the supplier manufactures or produces the good. I would like to start by asking a set of questions about the supplier and the product it supplies.

20. What nationality is the supplier company?
21. How long have you traded with this company? [Number of years]

21. What ownership structure does your supplier have? (Please tick all that apply)

A state-owned company  Yes □  No □
A privately owned company Yes □  No □
A company listed on a stock exchange Yes □  No □
A family-controlled business Yes □  No □
A multinational company Yes □  No □
A subsidiary of a foreign MNC Yes □  No □
An international Joint Venture Yes □  No □
A township or village enterprise Yes □  No □
A wholly-owned foreign enterprise Yes □  No □

22. What product does this supplier provide?

23. How long have you traded with this company? (Approximately, how many years)

I would like to ask you a few questions about the character of the product.

24. Product complexity

Adapted from Cannon and Homberg (2001) and Cannon and Perreault (1999)

<table>
<thead>
<tr>
<th>Simple</th>
<th>Complex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Compared to other purchases your firm makes, the product/service is

<table>
<thead>
<tr>
<th>Complicated</th>
<th>Uncomplicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Compared to other purchases your firm makes, the product/service is

<table>
<thead>
<tr>
<th>Technical</th>
<th>Non-Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Compared to other purchases your firm makes, the product/service is

25. Relative to other products/components, to what extent do you agree with the following statements about the product we are now considering?

Adapted from Stump and Heide (1996) and Cannon and Perreault (1999)
I would now like to ask a set of questions about your relationship with this supplier.

26. On average, about how many times per quarter do you receive deliveries from this supplier? (If you’re unsure, please estimate)

□ Once, or less frequently □ 16-20 times
□ 2-5 times □ 21-25 times
□ 6-10 times □ 26-30 times
□ 11-15 times □ More than 30 times

27. To what extent do you agree with the following statements?

Adapted Ganesan (1994) – Suppliers Dependence

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
</tbody>
</table>

We are important to this supplier

□ □ □ □ □ □ □

We account for a large proportion of this suppliers’ total sales

□ □ □ □ □ □ □

If we stopped buying from this supplier they would find it difficult to fill the gap in their order book

□ □ □ □ □ □ □

28. To what extent do you agree with the following statements?

Adapted from Ganesan (1994) - Buyer Dependence

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4</td>
<td>5 6 7</td>
</tr>
</tbody>
</table>

This supplier is crucial to our future performance

□ □ □ □ □ □ □
It would be difficult for us to replace this supplier

We are dependent on this supplier

We do not have a good alternative to this supplier

29. To what extent do you agree with the following statements?

Adapted from Buvik and John (2000)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

This supplier has invested in order to adjust to our requirements

This supplier has carried out considerable adjustments in order to meet our requirements

This supplier has made heavy investments in order to deal with deliveries to our firm

This supplier has restructured its processes in order to realize higher quality of the specific product/service sold to us

30. To what extent does your company or the supplier have control over:

Adapted from Millington et al. (2006)

<table>
<thead>
<tr>
<th>The Supplier</th>
<th>Your Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

This supplier’s processes and technology

Ongoing design and/or engineering changes

Selection of this supplier’s sub-suppliers

This supplier’s quality control

31. To what extent do you agree with the following statements?

Adapted from Ganesan (1994) – Supplier Credibility

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

This supplier’s representative has been frank in dealing with us
Promises made by this supplier’s representative are reliable

If problems such as shipment delays arise, the supplier’s representative is honest about the problems

This supplier’s representative has problems answering our questions

32.
To what extent do you agree with the following statements?

Adapted from Ganasan (1994) – Supplier Benevolence

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

This supplier’s representative cares for us

In times of shortages, this supplier’s representative has done more for us than we could possibly expect

This supplier’s representative is like a friend.

We feel that this representative has been on our side.

33.
To what extent do you agree with the following statements?

Adapted from Buvik and John (2000) and Buvik (2002) – Vertical Coordination

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

We regularly consult with this supplier about its selection of raw materials and components incorporated in the product(s) we order

We regularly exchange information about price developments and market conditions with this supplier

Our firms make regular joint efforts to improve the quality of the products we order from this supplier

We cooperate closely with this supplier on quality control of products delivered to our company

34.
To what extent do you agree with the following statements?

Adapted from Noordewier (1990) and Ruy (2006) – Monitoring Procedures
<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

We assess this supplier’s performance through a formal supplier evaluation program

The supplier must provide summary usage reports, tally sheets, or some similar kind of report (on a quarterly or monthly basis)

We conduct quality training for supplier personnel

The relationship we have with supplier makes use of many formal control mechanisms

Section 5: **SOCIALLY AND ENVIRONMENTALLY RESPONSIBLE PURCHASING PRACTICES AND THIS SUPPLIER**

35. Adapted from Bloom and Van Reenen (2007)

[General note – keep in mind that the central purpose of these questions is to allow us to create the 5-point scales by distinguishing between relatively “shallow” or superficial engagement with SERP, and “deeper” engagement. Hence, it’s worth pursuing things you think might help in that, even if that takes you somewhat off the script]

**Requirements**

*Can you describe the environmental and social supply chain policies that you apply to this supplier?*

*What kinds of environmental and social requirements have been introduced with this supplier?*

*Are there any specific environmental/social requirements that you apply to this supplier?*

[If respondents mention SEDEX/ISO 14,001/SA8000 or other accreditations, we’re keen to explore whether this is just a tick box requirement, or whether it’s more deeply embedded – a follow up question might be: “Are there any specific social or environmental requirements that you’re exploring through ISO,SEDEX etc?”]

[If respondents mention that they have their own criteria/policies/surveys; ask “What would a supplier have to do to pass/comply with your criteria?”]

*Can you give me specific examples? Can you think of any other examples?*
Prompt for both environmental and social policies

**Rationale**
*Can you take me through the rationale to introduce these processes?*
[If respondents cite wider organisational tendencies towards CSR, ask “why do you think your organisation is generally implementing CSR practices?”]
*What factors led to the adoption of these practices?*
Prompt for both environmental and social policies

**Process problem documentation**
*How do environmental and social problems typically get exposed and fixed?*
*Generally, how do these issues come to your attention?*
*Talk me through the process for a recent problem?*
Prompt for both environmental and social policies

**Monitoring Performance**
*Tell me how you track environmental and social performance in this supplier?*
*What kind of performance indicators would you use for performance tracking?*
*How frequently are these measured?*
*How is environmental and social performance in this supplier verified?*
[If visits/audits are mentioned, pursue this: “When did you last visit this supplier?”; “What would you seek to accomplish on a visit?”; “Do you visit or do you use a third-party agency?”; “Are visits announced or unannounced?”]
Prompt for both environmental and social policies

**Performance dialogue**
*How would you go about improving environmental and social performance in this supplier?*

[If a respondent says that they offer suppliers support/help etc, ask: “What forms does your support/help/encouragement of this supplier take?” Who would be present at a meeting/ What data would be available?]
What happens if the supplier isn’t achieving agreed environmental and social performance targets? Can you give me a recent example?

[If a respondent says that they offer suppliers support/help etc, ask: “What forms does your support/help/encouragement of this supplier take?”

What kind of action would follow such an eventuality?

Does this supplier meet your agreed actions?

Prompt for both environmental and social policies

Section 6: COMPANY SOCIALLY AND ENVIRONMENTALLY RESPONSIBLE PURCHASING AND CSR POLICIES

We would now like to ask some general questions about environmental and social policies in your company.

37. To what extent do you agree with the following statements?

Adapted from Simpson et al (2007), Maignan et al. (1999) and Maignan and Ferrell (2000)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>In between</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Our firm has a clear policy statement urging environmental awareness in every area of the business

Protecting the environment is a central corporate value in our firm

At our firm, we make a concerted effort to make every employee understand the importance of environmental management

At our firm we have programs that encourage the diversity of our workforce (in terms of age, gender and race)

Internal policies prevent discrimination in employees’ compensation and promotion

At our firm we make a concerted effort to ensure that every employee complies with health and safety policies and procedures
38. To what extent do you agree with the following statements?

*Adapted from Cousins et al. (2006) – Responsible Purchasing Status*

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>In between</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 4 5 6 7</td>
</tr>
</tbody>
</table>

Top management is supportive of our efforts to improve socially and environmentally responsible procurement

In this company, socially and environmentally responsible procurement is considered a vital part of our corporate strategy

Purchasing views on socially and environmentally responsible buying are considered important in most top managers’ eyes

39. Can you please rate the extent to which you agree with the following statements?

*Adapted from Son and Benbasat (2007) and Campbell (2007)*

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>In between</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3 4 5 6 7</td>
</tr>
</tbody>
</table>

In evaluating our environmental and social supply chain management activities, we pay considerable attention to those of key competitors

In designing our environmental and social supply chain management program, we model our activities on those of other organizations perceived as successful

Competitors with well-developed environmental and social supply chain management programs are perceived favourably by others in our industry

Undertaking environmental and social supply chain management activities is normal in our industry

We have a high degree of awareness concerning the environmental and social supply chain management activities of our rivals

Our competitors have used environmental and social supply chain management to their advantage

Our firm’s success depends significantly upon our participation in environmental and social supply chain management

Environmental and social supply chain management is something we feel we must do
We actively participate in industry, trade, or professional associations that promote environmental and social supply chain management

☐ ☐ ☐ ☐ ☐ ☐ ☐

Significant pressure to engage in environmental and social supply chain management is placed upon us from industry and professional sources that support environmental and social supply chain management

☐ ☐ ☐ ☐ ☐ ☐ ☐

40.
I’d like to ask you to rate the importance of a specific set of sources of pressures to implement socially and environmentally responsible procurement.

<table>
<thead>
<tr>
<th>Source</th>
<th>No Pressure</th>
<th>In between</th>
<th>Very high Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government/Legislator</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Customers</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Shareholders/Investors</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Suppliers</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Environmental Organizations</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Local Communities</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
</tbody>
</table>

41.
To what extent do you agree with the following statements?
Adapted from Simpson et al. (2007)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>In between</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4  5  6  7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our major customers require us to achieve ISO 14001 certification</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Our major customers have a clear policy statement on their commitment to the environment</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Our major customers require us to achieve SA8000 certification</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>Our major customers would withhold our supply contract if we did not meet their environmental performance requirements</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
</tr>
</tbody>
</table>

I would now like to ask a set of questions about environmental and social supply chain management activities in your company.

42.
Is your company a member of or signatory to any of the following organisations or agreements?

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Yes ☐</th>
<th>No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Global Compact</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Ethical Trade Initiative (ETI)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>International Labour Organization (ILO)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Fair Labour Association (FLA)</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Other. Please specify:

43. Has the firm taken actions in the following areas with regard to suppliers?

Adapted from Rao (2002) and Rao and Holt (2005)

<table>
<thead>
<tr>
<th>Area</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding awareness seminars for suppliers</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Guiding suppliers to enable them to establish their own environmental programmes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Bringing together suppliers in the same industry to share their know-how and problems</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Informing suppliers about the benefits of cleaner production and technologies</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Urging/pressuring suppliers to take environmental actions</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Choosing suppliers based on environmental criteria</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Arranging for funds to help suppliers to purchase equipment for pollution prevention, waste water recycling etc</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sending in-house company auditors to appraise the environmental performance of suppliers</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

END OF QUESTIONNAIRE
APPENDIX 2 – SCORE CARDS
### Responsible Supply Chain REQUIREMENTS

A. Can you describe the environmental/social supply chain policies that you apply to this supplier?
B. What kinds of environmental/social requirements have been introduced with this supplier?
C. Are there any specific environmental/social requirements that you apply to this supplier?

<table>
<thead>
<tr>
<th>Scoring Grid</th>
<th>Score 1</th>
<th>Score 3</th>
<th>Score 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No evidence of environmental or social supply chain requirements.</td>
<td>Some evidence that environmental or social supply chain policies have been applied. Evidence could include reference to corporate environmental or social supply chain policy or generic policies such as ISO14001 or ETI. Little or no evidence of direct engagement with the supplier through specific environmental requirements.</td>
<td>Clear evidence that environmental/social supply chain policies have been formally applied. All major aspects of environmental/social management should be considered and there is clear evidence that these have been applied to the supplier through specific environmental/social requirements</td>
<td></td>
</tr>
</tbody>
</table>

**Examples**

- "Environment is kind of irrelevant because they are a software company and provide software development services" 
- "We’d be looking at ISO 14001, we also apply our Responsible Procurement Policy, which is available on our website and that gives our expectations of suppliers in terms of the environmental and social impacts of their business". 
- "This supplier would have completed all of our environmental standards questionnaires, looking at how they manage aspects of product stewardship. We expect them to adhere to our standards once we’ve assessed them against it. These standards are areas where we expect them to investigate, take action and apply to their own supply chain"
**Responsible Supply Chain RATIONALE**

A. Can you take me through the rationale to introduce these processes?
B. What factors led to the adoption of these practices?

<table>
<thead>
<tr>
<th>Scoring Grid</th>
<th>Score 1</th>
<th>Score 3</th>
<th>Score 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No evidence of a rationale for introducing RPSM. This may reflect absence of RPSM or failure to provide a rationale</td>
<td>RPSM is supported by a restricted rationale. This may derive from specific SCM issues, or the implementation of CSR without explicit mention of SCM considerations.</td>
<td>RPSM is supported by an integrated and clearly stated rationale which draws on SCM considerations, identifying the reputational/strategic/economic advantages of RPSM, as well as the relationship between RPSM and corporate CSR</td>
<td></td>
</tr>
</tbody>
</table>

**Examples**

- “Our company mission statement alludes to these sorts of things, as they were put on the agenda some years ago and implementation started 3 years ago”.
- “If you want to be successful in supplying UK supermarkets, you need to raise your environmental and social standards of procurement – we believe that businesses that do not respond to the environmental and social challenges ultimately won’t do any business”.
**Responsible Supply Chain PROCESS**

A. How do environmental problems typically get exposed and fixed?
B. Generally how do these issues come to your attention?
C. Talk me through the process for a recent problem?

<table>
<thead>
<tr>
<th>Scoring Grid</th>
<th>Score 1</th>
<th>Score 3</th>
<th>Score 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No evidence that a process is in place.</td>
<td>Problems are identified and resolved through an informal process. Respondents should be able to support their replies with examples.</td>
<td>Evidence of systematic processes such as an environmental/social questionnaire and evidence that formal processes are in place to deal with problems. Respondents are able to support their replies with examples.</td>
</tr>
</tbody>
</table>

**Examples**

- “The company was able to provide no evidence of an informal or formal process”.
- “The starting point was issuing a requirement quotation saying that this product must meet certain power consumption criteria…we then enter into a discussion on how to reduce power consumption…we try and understand why they cannot meet our requirements and talk about how we would reach it”.
- “As with all of our suppliers it would start with the product stewardship and labour standards questionnaires and depending how they scored there would be appropriate follow up actions. Have they trained their personnel/Do they monitor themselves”.

---
**Responsible Supply Chain MONITORING**

A. Tell me how you track environmental/social performance in this supplier?
B. What kind of performance indicators would you use for performance tracking?
C. How frequently are these measured?
B. How are they verified?

<table>
<thead>
<tr>
<th>Scoring Grid</th>
<th>Score 1</th>
<th>Score 3</th>
<th>Score 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No evidence of monitoring</td>
<td>Evidence that RPSM is the subject of an audit process which may be carried out by the buyer or a third party.</td>
<td>If respondents claim to use a third party monitoring organisation such as SEDEX the terms of engagement by the third party should be investigated. Case classification (3-5) should be based on the outcome of this search.</td>
<td>RPSM is regularly monitored through a systematic and regular audit processes. This is supported by supplier inspections which include RPSM and regular unannounced visits.</td>
</tr>
</tbody>
</table>

Examples

| “As I was saying we are not doing that as yet” | “We use our auditing procedures. Typically that would be annually, sometimes we may audit more or less depending on the nature of the product. In this case, because it is a chilled product we would audit on an annual basis”. | “We have a comprehensive process of tracking environmental performance. We ask them to fill in questionnaires which address their performance in key areas. We measure annually and we are auditing annually all of our key suppliers. We have the right to go down there and visit the suppliers and witness at firsthand what the suppliers are telling us” |
**Responsible Supply Chain PERFORMANCE DIALOGUE**

A. How would you go about improving environmental and social performance in this supplier?
B. What happens if the supplier isn’t achieving agreed environmental and social performance targets?

<table>
<thead>
<tr>
<th>Scoring Grid</th>
<th>Score 1</th>
<th>Score 3</th>
<th>Score 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No evidence that performance dialogue takes place</td>
<td>Evidence that environmental/social performance is reviewed and discussed with suppliers. Such reviews may be responsive or problem centred. Some evidence of a collaborative approach to solve environmental/social performance issues</td>
<td>Evidence that environmental/social performance is continually reviewed and discussed with suppliers. A focus on problem solving and partnership sourcing practices to improve performance. A clear commitment to take action and/or source elsewhere if satisfactory performance cannot be achieved.</td>
</tr>
</tbody>
</table>

**Examples**

“*We don’t discuss environmental or social performance with this supplier*”.

“We would sit down with them and highlight where they are falling short, and what they could do about it to improve it to the standards that we expect. If they did not break legislation we would be reasonably tolerant”.

“They would know that we don’t discuss these issues directly, and that our expectation is that they can meet our standards. If they don’t achieve it, we would look for an alternative provider.”

“The balanced scorecard essentially forms the agenda for a regular performance review meeting we have with this supplier. Concerns are addressed at these performance reviews. We have environmental advisors who would offer assistance to the supply chain provider. If they couldn’t meet our concerns we would source elsewhere”.