Chapter 4: Supply Chain Management

Dr. Nikolaos A. Panayiotou, Lecturer

National Technical University of Athens, Faculty of Mechanical Engineering, Section of

Industrial Management & Operational Research, 157 80 Zografos, Greece

Tel.: +302107723570 Fax: +302107723571 E-Mail: panayiot@central.ntua.gr

Dr. Konstantinos Aravossis, Lecturer

National Technical University of Athens, Faculty of Mechanical Engineering, Section of

Industrial Management & Operational Research, 157 80 Zografos, Greece

Tel.: +302107721359 Fax: +302107723571 E-Mail: arvis@mail.ntua.gr

The Concept of Supply Chain

Various definitions can be found in the literature about supply chain. These definitions change with the industry vertical and the context. A simple and rather generic definition defines supply chain as the flow and management of resources across the enterprise for the purpose of maintaining the business operations profitably (Sehgal, 2009). Resources can be people, materials, information and other organizational assets such as assets and machinery. The scope of supply chains extends through the organization from the demand end to the supply end. Traditionally, supply chain management has focused on efficiently integrating supplier and customer activities so that products are produced and distributed in the right quantities, at the demanded quality, at acceptable prices, to the right locations, and on time, in order to minimise system-wide costs while satisfying service-level requirements (Visser et al., 2007).

The scope of the supply chain can be analysed by recognizing two categories of functions: core and extended (Sehgal, 2009). The core supply chain functions primarily relate to the demand and supply management processes directly controlled by the enterprise. The core supply chain functions can be classified as planning functions or execution functions. The planning functions project a longer-term view of enterprise plans, allow what-if analysis, and provide the impact of these plans on corporate financial/ operational metrics. These planning processes primarily serve as decision-support tools for managers. Examples of the supply chain planning functions are network planning, demand planning, and supply planning. The execution functions provide the schedule of daily operations, and help the enterprise execute the selected supply chain plans through purchasing, manufacturing, distributing, and sales operations. Typical examples of the supply chain execution functions are transportation and warehousing operations. The extended functions enable the extension of the supply chain towards the customers and the suppliers. Customer

Relationship Management (CRM) extends the demand end of supply chains and provides processes for including demand by managing customers, prices and marketing strategies. On the supply end, Supply Relationship Management (SRM) processes extend the supply chains by managing sourcing and suppliers to ensure reliable sources for fulfilling the existing demand. Finally, supply chain collaboration processes enable sharing the planning and execution process data and information with the supply chain partners with the intention of enhancing the responsiveness and flexibility of the supply chain. Typical examples of collaborative processes are demand and supply collaboration with the suppliers or carrier portal to monitor and track shipments.

The strategic importance of supply chain management has been growing during the past two decades (Lee & Kim, 2009). The literature on supply chain management recognises the importance of the strategic management of the supply chain (Croom et al., 2000; Macbeth and Ferguson, 1994; Cox, 1997). Companies in general do not seek to achieve cost reductions or profit increases at the expense of their supply chain partners. Rather, they utilise the supply chain to make themselves more competitive as a whole through collaboration (Macbeth and Ferguson, 1994; Croom et al., 2000). Traditionally, suppliers have a large and direct impact on cost, quality, speed, and responsiveness of buying companies (Ragatz et al., 1997). However, the modern competitive business environment requires reconsideration of the whole supply chain and products. As a result, active collaboration with the supply chain stakeholders can provide benefits, such as reduced cost, increased responsiveness to changes, and visibility across the whole process with no organizational boundary constraints. Supply chain collaboration processes help in identifying, establishing, and managing such opportunities.

CSR & Supply Chain Management

Introduction in CSR
Over the last decade, there has been an apparent shift from adopting more responsible business practices as a result of regulatory citations, consumer complaints, and special interest group pressures, to proactive research exploring corporate solutions to social problems and incorporating new business practices that will support these issues (Business for Social Responsibility Education Fund, 2000). Corporate Social Responsibility (CSR), also known as corporate responsibility, corporate citizenship, responsible business or corporate sustainability, refers to the obligation of a firm beyond that required by law or economics, to pursue long-term goals that are beneficiary for society (Robbins & Decenzo 2001). CSR is essentially the deliberate inclusion of public interest into corporate decision-making that goes beyond the corporation's statutory obligation to comply with legislation. In fact, it is only in recent years that the number of organisations engaging in social behaviours and activities has increased markedly (McWilliams et al., 2006; Stainer and Stainer, 2003; McIntosh et al., 2003). According to Pryce (2002), the current focus, is driven by five forces: customer pressure, changes in business procurement, government legislation and pressure, the rise of socially responsible investment, and the changing expectations of employees.

The triple bottom line (TBL) concept coined by John Elkington and now common currency recognizes that corporations not only add economic value, but also impact on social and environmental value added (Richardson, 2004). These concepts correspond to the three pillars of sustainable development, which have often been interpreted by economists as economic, social and environmental capitals. **Figure 1** depicts the three dimensions of CSR decomposed into the common sub-areas in which it is evaluated.
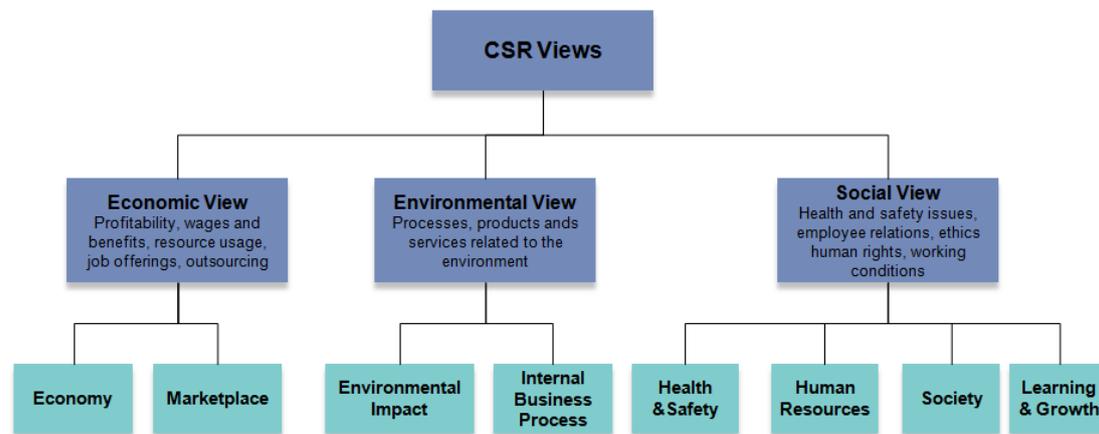

Figure 1: CSR Views & Performance Dimensions (Panayiotou et al., 2009)

CSR in Supply Chain Management

As the nature of many business relations is changing from companies manufacturing goods within wholly owned facilities in national operations to companies engaging in supply chains and supplier-based manufacturing across national borders, the concept of CSR is likewise transforming (Andersen & Skjoett-Larsen, 2009) encompassing the entire supply chain of a company. Except from their own corporate practices, multinational companies are also held responsible for environmental and labour practices of their global trading partners such as suppliers, third party logistics providers, and intermediaries over which they have no ownership (Jenkins, 2001; Maloni and Brown, 2006; Business for Social Responsibility, 2001; Pedersen & Andersen, 2006; Jørgensen and Nielsen, 2001; Roberts, 2003). The calls for CSR in global supply chains should particularly be seen in light of the fact that a large part of global trade is conducted through systems of governance, which link firms together in various sourcing and contracting arrangements (Gereffi, 1994; Sobczak, 2006; Nielsen et al., 1997). The concept of governance implies that the key actors in the supply chain – often large multinational corporations – take responsibility for the inter-firm division of labour and specific participants' capacities to upgrade their activities (Gereffi, 2001). Thus, they are able to control production over large distances without exercising ownership (Jenkins, 2001). These key actors are typically located in developed countries and include not only multinational manufacturers, but also large retailers and brand-name firms. The power held by these corporations stems from their market power and control over key resources needed in the supply chains of which they are part. Given their power, these actors play a significant role in specifying what should be produced, how and by whom (Gereffi, 1994). The companies adopting such principles hold themselves accountable for the social and environmental impacts arising along the supply chain, and are compelled to integrate ecological and social aspects into their decisions and actions along their supply chains. The corporations might also provide technical support to their suppliers to enable them to

achieve the required performance. Jenkins (2001) argues that the growth of 'global value chains', through which Northern buyers control a web of suppliers in the South, has led to calls for them to take responsibility not only for aspects such as quality and delivery dates, but also for working conditions and environmental impacts.

Despite the history of CSR, applications of CSR concepts to Supply Chains have only emerged in the last few years (e.g. Klassen & Awaysheh, 2006; Maloni & Brown, 2006; Roberts 2003; Seuring et al., 2006; Spence, 2006). Many different terms are used in order to describe the social responsible management of the supply chain under a cross-functional perspective, with the most dominating these of Sustainable Supply Chain Management (SSCM) (Carter & Rogers, 2008) and Logistics Social Responsibility (LSR) (Ciliberti et al., 2008; Carter & Jennings, 2000). Sustainable Supply Chain Management is defined 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 (Carter & Rogers, 2008). Taking into account that logistics is an aspect of supply chain, it can be argued that Sustainable Supply Chain Management is a broader concept than Logistics Social Responsibility. However, a literature review in the subject shows that the notion of sustainability is not consistently perceived and defined (Carter & Rogers, 2008). At the same time, the majority of the reported corporate practices concerning the supply chain refers to CSR applications included in the Logistics Social Responsibility area, so in the next paragraphs a classification scheme of LSR is used in order to present the most popular practices of social responsibility in the Supply Chain.

Supply Chain Management encompasses several processes, i.e. inbound and outbound transportation management, warehousing, inventory management, management of third-party logistics service providers, sourcing and procurement, packaging and assembly, and customer service. In accordance, the literature on LSR examines a selection of these processes based on their relation to CSR issues, classified in five main categories: purchasing, transportation, packaging, warehousing (related to the forward flow of materials), and reverse logistics (related to the reverse flow) (Ciliberti et al., 2008).

Purchasing Social Responsibility (PSR) can be defined as the involvement of the purchasing function on socially responsible logistics activities advocated by organizational stakeholders (Carter & Jennings, 2002; Maignan et al., 2002). The activities related to PSR include environmental purchasing, sourcing from minority-owned suppliers, and human rights, safety, and philanthropy issues relating to supply management. If a company adopts social and/or environmental standards, the purchasing function can be used to transfer them to suppliers, so generating a chain effect by which quick and deep social and environmental changes can be caused (Green et al., 1996; Preuss, 2000). Carter and Jennings (2004) found that a people-oriented culture leads to higher levels of responsibility in accomplishing purchasing activities. Carter (2005) found no direct relationship between the adoption of PSR practices and the costs incurred by a firm. According to his study, organizational learning and firm performance act as key mediating variables. Environmental Purchasing (EP) can be considered as a subset of PSR (Carter and Jennings, 2004). Environmental Purchasing deals

with the involvement of the purchasing function in activities aimed to facilitate recycling, reuse, and resource reduction (Carter & Carter, 1998). PSR practices can be classified as organizational (Maignan et al., 2002) and managerial (Wood, 1996; Motwani et al., 1998; Carter, 2000; Carter and Jennings, 2000, 2002b, 2004; Carter et al., 2000). The most relevant PSR practices (as cited in the literature) are reported by Ciliberti et al. (2009) and are included in **Table 1**, grouped in seven main topics, covering at the same time the CSR dimensions presented in **Figure 1**.

Table 1: PSR Practices (Ciliberti et al., 2009)

Topic	Practices	
Organizational Practices	Defining CSR objectives for the purchasing function	Designating organizational members in charge of PSR
	Educating suppliers to CSR topics	Communicating achievements to stakeholders
	Monitoring suppliers	Receiving stakeholders' feedbacks
	Sanctioning suppliers	
Managerial Practices Ethics	Not accepting gifts from suppliers	Not accepting travels or meals or other free goods/services
	Not pushing illegal pressures on suppliers or exaggerating a problem to gain concessions (e.g. price cut)	Not spreading information to suppliers (e.g. reveal competitors' offers and allow suppliers to reply on them)
	Not treating in a different way a supplier who is preferred by higher-level management	Not favoring certain suppliers because they are also good customers
	Not allowing other departments than purchasing (e.g. production) to purchase directly without respecting professional purchasing standards	Not allowing personal likes or dislikes to interfere with supplier selection process
	Not inventing a second supply source to gain a competitive advantage	Not using unclear contractual terms to gain a competitive advantage
	Not deceiving a salesman in a negotiation	Not defining specifications that favor a certain supplier
Environment	Cooperating with suppliers to ensure that their processes and products are environmentally sustainable	Analyzing product life cycle to evaluate the environmental compliance of products and packaging
	Requesting suppliers to commit in waste reduction	Purchasing goods with reduced, recyclable, and reusable packaging
	Participating to design of products for disassembly, recycling, and reusing	
Diversity	Purchasing from suppliers belonging to ethnic minorities or women-owned	Elaborating formal programs to favor procurement from suppliers belonging to minorities
Human Rights	Analyzing labor conditions of workers	

Topic	Practices	
	in supplier companies & ensuring that forced or child labor is not carried out and that wages are reasonable	
Safety	Verifying safety conditions in suppliers' plants	
Philanthropy/ Community	Defining programs to support local supplier development	Organizing bids, donations, and other charitable initiatives

Different empirical studies suggest that the adoption of PSR increases trust with the suppliers and improves the communication process with them and cooperation and leads to channels' increased performance (Carter & Jennings, 2002).

Sustainable Packaging can be defined as packaging that (i) is beneficial, safe & healthy for individuals and communities throughout its life cycle, (ii) meets market criteria for performance and cost, (iii) is sourced, manufactured, transported, and recycled using renewable energy, (iv) optimizes the use of renewable or recycled source materials, (v) is manufactured using clean production technologies and best practices, (vi) is made from materials healthy in all probable end-of-life scenarios, (vii) is physically designed to optimize materials and energy, and (viii) is effectively recovered and utilized in biological and/or industrial closed loop cycles (Sustainable Packaging Coalition, 2009). The packaging industry has been under pressure for more than 20 years to reduce the environmental impacts of its products (Ciliberti et al., 2008). In some countries, take-back legislation on packaging has made the packaging operation and planning a critical green logistics issue. The traditional narrow focused paradigm of waste reduction and recycling is loosing its validity within the context of packaging sustainability and a more holistic supply chain approach is beginning to be perceived as essential for meeting future community and industry challenges. (Sonneveld et al., 2005; Sarkis, 2003).

Sustainable Warehousing is a component of the sustainable supply chain. It includes activities such as, terminal and warehouse location, proper storing and disposing of hazardous materials, donation of excess or obsolete inventory to local communities, improved working conditions in warehouses and training to safely operate forklifts (Carter and Jennings, 2000; Carter and Jennings, 2002a). Most warehousing companies have little regard for the environmental impacts of their actions and do not understand the social consequences of their business activities. These companies consider factors such as cost effectiveness and customer satisfaction as the main performance indicators connected with their operation. In many cases, sustainable warehousing is closely connected with cost effectiveness, as in the case of reduced and safety costs and lower recruitment and labour turnover costs resulting from safer warehousing (Brown, 1996; Carter & Rogers, 2008; Carter et al., 2007).

Sustainable Transportation is defined as transportation that meets mobility needs while preserving and enhancing human and ecosystem health, economic progress, and social justice now and for the future (Deakin, 2001). According to Black (1996), sustainable transportation has an even deeper and important meaning defined as satisfying current

transport and mobility needs without compromising the ability of future generations to meet these needs. Lund & Clark (2008) state that in order to achieve a sustainable developed infrastructure that does not harm the environment and yet meets the power demand and mobility needs of the supply chain, a synergy of combining necessary technological changes in the transport sector with the better integration of fluctuating renewable energy sources into the electricity supply must be created. Substantial interest in Sustainable Transportation can be dated back to the early 1990s (Banister and Button, 1993; Nijkamp, 1994). The focus of early research was mainly on the economic and environmental dimensions of sustainability (Feitelson, 2002). The main environmental impacts are associated with (i) emissions of greenhouse gases, (ii) emissions of compounds that thin the stratospheric ozone layer, and (iii) transport-related production of persistent organic pollutants and their effects on biological systems. As to social issues related to transportation, Corsi et al. (1982) studied the promotion of minority motor carriers. Various methods and models have been developed to assess economic, social and environmental consequences of transport plans. However, at present, only few social indicators are being considered, because of the lack of knowledge and valid methods, tools and techniques for assessing relevant social impacts (Steg & Gifford, 2004).

Reverse Logistics is the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal (Rogers & Tibben-Lembke, 1998). It includes all issues related to source reduction, recycling, substitution, reuse, and disposal of materials (Stock, 1992). Reverse logistics management consists of managing the flow of merchandise from stores and customers back to the supplier. This returned merchandise may pass through a consolidation center. The complete returns transaction can contain a few shipment legs, warehousing, packing, handling, and other warehouse activities (Sehgal, 2007). Due to the complexity of managing the reverse flow, many companies prefer to subcontract the reverse logistics to a third-party logistics provider. These contracts may be limited to transportation and warehousing, or may include all services, such as disposition determination, disposal, and supplier credit reconciliation. The reverse logistics definition has evolved through the years, including environmental aspects besides the initial coverage of the reverse flow of materials from their typical final destination for the purpose of capturing value, or proper disposal. Lately, its scope has been widened (de Brito, 2003) considering reverse logistics as part of CSR, since it deals with the implementation, at the company level, of processes that guarantee the use and re-use (efficiently and effectively) of the value put into products (de Brito, 2003).

Codes of Conducts, Standards & CSR in Supply Chain Management

Trying to respond to the increased pressure (mainly by consumers and non-governmental organizations (NGOs)) and stakeholders expectations concerning social responsibility in the whole supply chain, the larger corporations (mostly the international ones) implemented systems and procedures to ensure that their suppliers comply with social and environmental

standards. Such systems can be used to transfer socially responsible behaviors along the chain, in particular to influence the practices of their business partners and to provide a baseline of social and environmental principles to be fulfilled (Andersen & Skjoett-Larsen, 2009). Although firms choose their own approach to enbody the CSR efforts in supply chains, many studies reveal that the most visible element in the approach of large multinational companies is the employment of corporate codes of conduct. The number of codes of conduct has grown spectacularly since the early 1990s (Hopkins, 1999; Welford, 2005; Welford and Frost, 2006; Jenkins et al., 2002). Whereas companies in the USA introduced such codes in the early 1990s, the use of codes did not become widespread among European companies until the mid-1990s (Jenkins, 2001). A code of conduct is a document stating a number of social and environmental standards and principles that a firm's suppliers are expected to fulfill (Mamic, 2005; Jenkins, 2001). Codes of conduct are increasingly introduced in contracts between a buyer company and its suppliers (Welford, 2005). In the majority of cases, their principles are based on local legislation (if existing) and international conventions such as Social Accountability 8000 (SA8000), AA1000, ISO 14001, Global Reporting Initiative (GRI) or UN's Global Compact. In many large multinational companies, the codes are accompanied by appropriate managerial systems for formulating, enforcing and revising the standards outlined in the codes (Organisation for Economic Co-operation and Development, 2001). However, empirical evidence has shown that the implementation of effective codes of conducts covering global supply chains is not an easy task (Leigh & Waddock, 2006). In the following paragraphs, the most influencing international conventions in the development of corporate codes of conduct are presented.

The **UN Global Compact Initiative** aims to create a more sustainable and inclusive global economy. Companies, especially multinational ones, were called upon to undertake to adhere to ten principles in their sphere of influence, in the areas of human rights, labour policy, environmental protection and anticorruption policy are derived from the Universal Declaration of Human Rights, the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention against Corruption. The UN Global Compact is a voluntary initiative and thus not a substitute for government measures, including the duty to ensure decisive laws for legal safety in sensitive areas.

AA1000 is a quality framework that aims to create a transparent and responsive sustainability accounting framework, that describes who has been included in the information gathering process and more importantly who has been included on its design. Its goal is to secure the quality of sustainability accounting, auditing and reporting. It is continually under development by AccountAbility, an international membership-based professional institute established in London in 1996.

SA8000 is the first global certification system for supply chain labour standards. It is a voluntary and auditable certification standard based on international workplace norms of International Labour Organisation (ILO) conventions, the Universal Declaration of Human Rights and the UN Convention on the Rights of the Child. SA8000 offers a stand-alone certification solution for managing aspects of corporate responsibility and certifiable

standards that is delivering auditable compliance for manufacturers and purchasers in the supply chain.

ISO 14001 is one of the most widely adopted standards in the area of CSR and is recognised as an international standard for environmental management. It was first published in 1996 by the International Organisation for Standardisation (ISO). ISO 14001 defines an environmental management system as that part of the overall management system of an organization that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy. Currently, an ISO social responsibility standard (**ISO 26000**) has been proposed and scheduled for 2010. ISO 26000 is the result of a still ongoing international and multi-stakeholder process based on the consensus and consolidated results of science, technology, and best practice to assist an organisation in addressing its social responsibilities. The standard intends to provide guidance related to: operationalising social responsibility; identifying and engaging with stakeholders; enhancing credibility of reports and claims made about social responsibility; emphasising performance results and improvements; promoting common terminology in the social responsibility field; and promoting sustainable development through the supply chain.

Global Reporting Initiatives (GRI) The Global Reporting Initiative is a voluntary quality-driven initiative established in September 2002, multi-stakeholder in structure, emphasising on corporate social responsibility issues. It is a 'practical expression' of the Global Compact, and those businesses that wish to report on their CSR performance can use the GRI Guidelines as a template. The reporting framework covers Vision and Strategy, Profile, and Governance Structure and Management Systems, plus the 'three pillars' of sustainability: Economic, Environmental and Social. More than 500 companies across 45 countries have adopted the GRI's sustainability reporting guidelines.

The standards used as a basis for the development of codes of conduct influence their effectiveness and credibility but they are not the only ones. Other factors affecting the codes are the diversity of supply chain participants, the scope of issues, the level of detail in substantive provisions, the effective implementation and ongoing management, the resources devoted to training, the monitoring and enforcement, the transparency and disclosure, the real or anticipated costs of compliance, public relations factors and performance measurement (Mamic, 2004). There are many difficulties involved with the assessment of the effect of the developed corporate codes of conduct. Like other private-sector initiatives, codes of conduct are developed and negotiated against a backdrop of international and national laws and regulations within the context of the management and operations of the enterprise (Mamic, 2004). The fact that the developed codes cannot be enforced in the same way as legal requirements, has led to some skepticism concerning their effectiveness (Klein, 2000; Sethi, 2002).

The Future of CSR in Supply Chain Management

A large concern related with the supply chain of businesses takes place in the last years. People are concerned about social responsibility issues such as human rights, environmental issues in logistics and ethics. It is no longer acceptable for a company to only guarantee is social responsible operations, it also has to guarantee such a behavior for its suppliers and the suppliers of their suppliers. It is not longer acceptable for the companies not to take responsibility for the conditions under which the actors of their supply chain operate.

References

Andersen M. & Skjoett-Larsen T. (2009), "Corporate social responsibility in global supply chains", Supply Chain Management: An International Journal, Vol. 14 No 2, pp. 75–86.

Banister D. & Button, K. (1993), "Transport, the Environment and Sustainable Development", Spon, London.

Black W. R. (1996), "Sustainable transportation: a US perspective", Journal of Transport Geography, Vol. 4, No 3, pp. 151–159.

Brown K. A. (1996), "Workplace safety: a call for research", Journal of Operations Management, Vol. 14 No. 2, pp. 157–61.

Business for Social Responsibility (2001), "Suppliers' Perspectives on Greening the Supply Chain", Business for Social Responsibility, Education Fund, San Francisco, CA.

Business for Social Responsibility Education Fund (2000), "Corporate Social Responsibility: A Guide to Better Business Practices", San Francisco: Business for Socially Responsible Education Fund, p. 179.

Carter C. R. & Carter J. R. (1998), "Interorganizational determinants of environmental purchasing: Initial evidence from the consumer products industries", Decision Sciences, Vol. 29 No 3, pp. 659–685.

Carter C. R. (2000), "Ethical issues in international buyer–supplier relationships: A dyadic examination" Journal of Operations Management, Vol. 18 No 2, pp. 191–208.

Carter C. R. (2005), "Purchasing social responsibility and firm performance: The key mediating roles of organizational learning and supplier performance", International Journal of Physical Distribution and Logistics Management, Vol. 35 No 3, pp. 177–194.

Carter C. R., Ellram L. M. & Tate W. L. (2007), "Structure and influence: a logistics management application of social network analysis", Journal of Business Logistics, Vol. 28 No. 1, pp. 137–68.

Carter C. R. & Jennings M. M. (2000), "Purchasing's Contribution to the Socially Responsible Management of the Supply Chain", Center for Advanced Purchasing Studies, Tempe, AZ.

Carter C. R. & Jennings M. M. (2002a), "Logistics social responsibility: An integrative framework", Journal of Business Logistics, Vol. 23 No 1, pp. 145–180.

Carter C. R. & Jennings M. M. (2002b), "Social responsibility and supply chain relationships", Transportation Research Part E, Vol.38 No 3, pp. 37–52.

Carter C. R. & Jennings M. M. (2004), "The role of purchasing in corporate social responsibility: a structural equation analysis", Journal of Business Logistics, Vol. 25 No 1, pp. 145–186.

Carter C. R., Kale R. & Grimm C. M. (2000), "Environmental purchasing and firm performance: An empirical investigation", Transportation Research Part E, Vol. 36 No 3, pp. 219–228.

Carter C. R. & Rogers D. S. (2008), "A framework of sustainable supply chain management: moving toward new theory", International Journal of Physical Distribution & Logistics Management, Vol. 38 No 5, pp. 360–387.

Ciliberti F., Pontrandolfo P. & Scozzi B. (2008), "Logistics social responsibility: Standard adoption and practices in Italian companies", International Journal of Production Economics, Vol. 113, pp. 88–106.

Corsi T. M., Tuck J. M. & Gardner L. L. (1982), "Minority motor carriers and the motor carrier act of 1980", Transportation Journal, Vol. 22 No 1, pp. 42–55.

Cox A. (1997), Business Success, Earlsgate Press, Midsomer Norton.

Croom S., Romano P. & Giannakis, M. (2000), "Supply chain management: an analytical framework for critical literature review", European Journal of Purchasing & Supply Management, Vol. 6, pp. 67–83.

de Brito M. P. (2003), "Managing reverse logistics or reversing logistics management?", ERIM PhD Series Research in Management, Vol. 35.

Deakin E. (2001), "Sustainable development and sustainable transportation: Strategies for economic prosperity, environmental quality, and equity", Working Paper, University of California at Berkeley, Institute of Urban and Regional Development.

Feitelson E. (2002), "Introducing environmental equity dimensions into the sustainable transport discourse: Issues and pitfalls", Transportation Research Part D, Vol. 7 No 2, pp. 99–118.

Gereffi G. (1994), "The organisation of buyer-driven global commodity chains: how US retailers shape overseas production networks", in Gereffi, G. and Korzeniewicz, M. (eds.), Commodity Chains and Global Capitalism, Greenwood Press, Westport, CT, pp. 95–122.

Gereffi, G. (2001), "Beyond the producer-driven/buyer-driven dichotomy. The evolution of global value chains in the internet era", IDS Bulletin, Vol. 32 No. 3, pp. 30–40.

Green K., Morton B. & New S. (1996), "Purchasing and environmental management: Interaction, policies and opportunities", Business Strategy and the Environment, Vol. 5 No 3, pp. 188–197.

Hopkins M. (1999), "The Planetary Bargain. Corporate Social Responsibility Comes of Age", Macmillan, London.

Jenkins R. (2001), "Corporate Codes of Conduct. Self-Regulation in a Global Economy", United Nations Research Institute for Social Development, Geneva.

Jenkins R., Pearson R. & Seyfang G. (2002), "Introduction", in Jenkins R., Pearson R. & Seyfang, G. (Eds), "Corporate Responsibility and Labour Rights. Codes of Conduct in the Global Economy", Earthscan Publications, London, pp. 1–10.

Jørgensen, H. B. & Nielsen A. (2001), "Responsible supply chain management", Revision & Regnskabsvæsen: Tidsskrift for erhvervsøkonomi og skatteforhold, No. 5.

Klassen R. D. & Awaysheh A. (2006), "Building the triple-bottom line: Integrating social issues into supply chain management", In: Mendibil K., Shamsuddin A. (eds.), "Moving up the value chain, Vol. 2", Glasgow: University of Strathclyde, pp. 699–708.

Klein N. (2000), "No Logo", Flamingo, London.

Lee K. H. & Kim J. W. (2009), "Current status of CSR in the realm of supply management: the case of the Korean electronics industry", Supply Chain Management: An International Journal, Vol. 14 No 2, pp. 138–148.

Leigh J. and Waddock S. (2006), "The emergence of total responsibility management systems: J. Sainsbury's (plc) voluntary responsibility management systems for global food retail supply chains", Business and Society Review, Vol. 111 No. 4, pp. 409–426.

Lund H. & Clark II W. W. (2008), "Sustainable energy and transportation systems introduction and overview", Utilities Policy, Vol. 16, pp. 59–62.

Maignan I., Hillebrand B. & McAlister D. (2002), "Managing socially-responsible buying: How to integrate non-economic criteria into the purchasing process", European Management Journal, Vol. 20 No 6, pp. 641–648.

Maloni M. J. & Brown M. E. (2006), "Corporate social responsibility in the supply chain: an application in the food industry", Journal of Business Ethics, Vol. 68 No 1, pp. 35–52.

Macbeth D. K. & Ferguson N. (1994), "Developing customer-supplier relationships", PSERG Conference, Glasgow.

Mamic I. (2004), "Implementing Codes of Conduct: How Business Manage Social Performance in Global Supply Chains", International Labour Organization.

Mamic I. (2005), "Managing global supply chain: the sports footwear, apparel and retail sectors", Journal of Business Ethics, Vol. 59, pp. 81–100.

McIntosh, Thomas, Leipziger & Coleman (2003), "Living Corporate Citizenship. Strategic Routes to Socially Responsible Business", Prentice Hall London.

McWilliams A., Siegel D. S. & Wright P. M. (2006), "Introduction – Corporate Social Responsibility: Strategic Implications", Journal of Management Studies, Vol. 26 No 1, pp. 1–18.

Motwani J., Kumar A. & Mohamed Z. (1998), "Ethical behavior of Indian purchasing managers", Transportation Research Part E, Vol. 34 No 2, pp. 161–168.

Nielsen, L. E., Schaumburg-Muller H. & Seirsen, H. (1997), "Firms in Development: Approaches to Understanding Firms in Developing Countries", DICM Working Paper, Copenhagen Business School, Copenhagen.

Nijkamp P. (1994), "Roads toward environmentally sustainable transport", Transportation Research Part A, Vol. 28 No 4, pp. 261–271.

Organisation for Economic Co-operation and Development (2001), "Making Codes of Corporate Conduct Work: Management Control Systems and Corporate Responsibility", Organisation for Economic Co-operation and Development, Paris.

Panayiotou N., Aravossis K. & Saridakis K. (2009), "An Evaluation Approach of CSR Practices in the Greek Manufacturing Sector", in Idowu S. O. & Filho W. L. (eds.) "Professionals' Perspectives of CSR", Springer.

Pedersen, E. R. & Andersen, M. (2006), "Safeguarding corporate social responsibility (CSR) in global supply chains: how codes of conduct are managed in buyer-supplier relationships", Journal of Public Affairs, Vol. 6 Nos 3/4, pp. 228–240.

Preuss L. (2000), "Should you buy your customer's values? On the transfer of moral values in industrial purchasing", International Journal of Value-Based Management, Vol. 13 No 2, pp. 141–158.

Pryce V. (2002), "CSR – Should It Be the Preserve of the Usual Suspects?", Business Ethics: A European Review, Vol. 11 No 2, pp. 140–142.

Ragatz G. L., Handfield R. B. & Scannell T. V. (1997), "Success factors for integrating suppliers into new product development", Journal of Product Innovation Management, Vol. 14 No. 3, pp. 190–202.

Richardson J. (2004), "Accounting for Sustainability: Measuring Quantities or Enhancing Qualities?", in Henriques A., Richardson J. (Eds), "The Triple Bottom Line – Does It All Add Up?", Earhscan, pp. 34–44.

Roberts S. (2003), "Supply chain specific? Understanding the patchy success of ethical sourcing initiatives.", Journal of Business Ethics, Vol. 44 No 2, pp.159–170.

Robbins S. & Decenzo D. (2001), "Fundamentals of management", 3rd ed., Upper Saddle River, NJ: Prentice Hall.

Rogers D. S. & Tibben-Lembke R. S. (1998), Going Backwards: Reverse Logistics Trends and Practices, Reverse Logistics Executive Counsil.

Sarkis J. (2003), "A strategic decision framework for green supply chain management", Journal of Cleaner Production, Vol. 11 No 4, pp. 397–409.

Sehgal V. (2009), "Enterprise Supply Chain Management: Integrating Best-in-Class Processes", John Wiley & Sons Inc.

Sethi S. P. (2002), "Standards for corporate conduct in the international arena: challenges and opportunities for multinational corporations", Business and Society Review, Vol. 107 No 1, pp. 20–40.

Seuring S., Muller M. & Morana R. (2006), "Case study research in the field of sustainable supply chain management" In: Mendibil K., Shamsuddin A. (eds) "Moving up the value chain Vol. 2", Glasgow: University of Strathclyde, pp. 747–756.

Sobczak A. (2006), "Are codes of conduct in global supply chains really voluntary? From soft law regulations of labour relations to consumer law", Business Ethics Quarterly, Vol. 16 No. 2, pp. 167–84.

Sonneveld K., James K., Fitzpatrick L. & Lewis H. (2005), "Sustainable Packaging: How do we Define and Measure It?", 22nd IAPRI Symposium 2005, Brazil.

Spence L. J. (2006), "Ethical issues in the UK domestic supply chain", London: Institute of Business Ethics.

Stainer A. & Stainer L. (2003), "Editorial: Business Performance and Corporate Social Responsibility", International Journal of Business Performance Management, Vol. 5 No 2/3, pp. 107 – 108.

Steg L. & Gifford R. (2004), "Sustainable transportation and quality of life", Journal of Transport Geography, Vol. 13, pp. 59–69.

Stock J. R. (1992), "Reverse Logistics", Council of Logistics Management, Oak Brook.
Sustainable Packaging Coalition (2009), Definition of Sustainable Packaging, accessed on the web address:
http://www.sustainablepackaging.org/pdf/DEFINITION_SPC_V%202.0%20one%20page_200910.pdf

Visser W., Matten D., Pohj M. & Tolhurst N. (2007), "The A to Z of Corporate Social Responsibility", John Wiley & Sons Ltd.

Welford R. (2005), "Corporate social responsibility in Europe. North America and Asia. 2004 survey results", Journal of Corporate Citizenship, No. 17, pp. 33–52.

Welford R. & Frost S. (2006), "Corporate social responsibility in Asian supply chains", Corporate Social Responsibility and Environmental Management, Vol. 13, pp. 166–76.

Wood G. (1996) "Ethical issues in purchasing", in: Kitson A. & Campbell R. (Eds.), "The Ethical Organisation", Macmillan, Basingstoke.